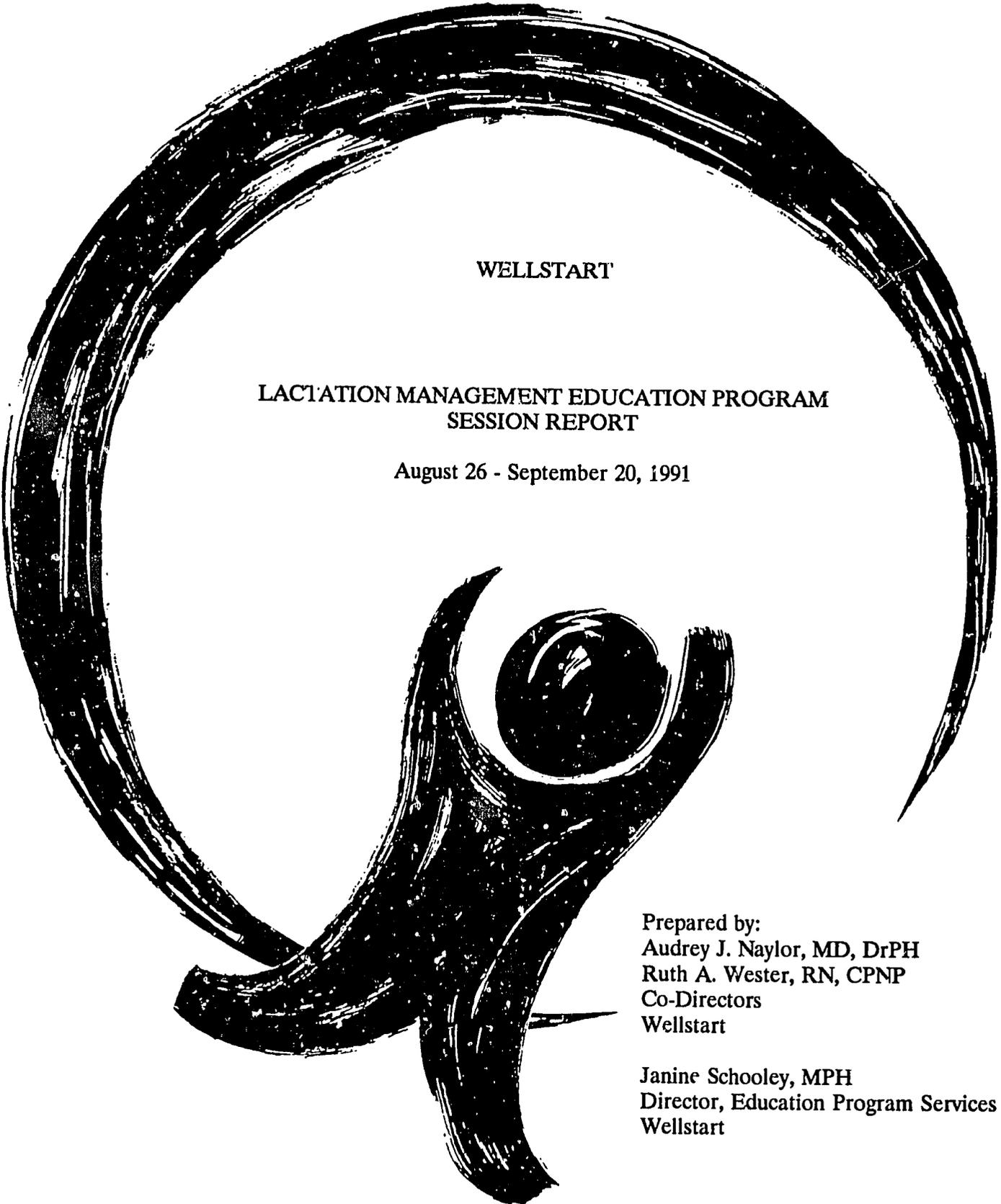


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WELLSTART

LACTATION MANAGEMENT EDUCATION PROGRAM
SESSION REPORT

August 26 - September 20, 1991

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TABLE OF CONTENTS

I.	Introduction and Summary	1
II.	Comments on Specific Program Components	2
III.	Recommendations for the Future	4

APPENDICES:

- 1: Participants
- 2: Description of Advanced Study Fellowship
- 3: Course Schedule
- 4: Faculty and Staff List
- 5: Pre and Post Test Scores Summary
- 6: Course Evaluation Summary
- 7: Team Program Plans

Guatemala

Zambia

Pakistan

Lady Reading Hospital

Hayat Shaheed Teaching Hospital

Uganda

Mulago Hospital

Mbarara Hospital

Mulago Lactation Management,
Education and Research
Center

I. Introduction and Summary

A Lactation Management Education (LME) Program course was held at the Wellstart facilities in San Diego from August 26 - September 20, 1991. Nineteen multidisciplinary health professionals from six teaching hospitals in Guatemala City, Guatemala; Lusaka, Zambia; Kampala, Uganda; Mbarara, Uganda; and Peshawar, Pakistan attended the four week course. In addition, one Advanced Study Fellow (August 19 - October 7, 1991) participated in course activities as part of the Fellowship experience. This particular Fellow is a pediatrician from Kampala, Uganda who has participated in the Wellstart Program since entering the August-September 1988 LME course. Please see Appendix 1 for a list of all participants with professional disciplines and affiliations noted. See Appendix 2 for a description of the Advanced Study Fellowship.

The goal and objectives for the LME Program of which this course is a part are as follows:

Goal

To assist the promotion of breastfeeding in developing countries by improving the knowledge regarding the clinical management of lactation and breastfeeding of current and future perinatal health care providers.

Objectives

- (1) To train teams of physicians, nurses and nutritionists from teaching hospitals as lactation specialists. These teams will be prepared to assume responsibility for breastfeeding programs designed to offer both service and teaching and to function as models for possible replication in other teaching hospitals.
- (2) To assist these teams in developing a model service and teaching program appropriate to their own setting.
- (3) To assist these teams in designing inservice and continuing education activities regarding lactation and breastfeeding for their physician, nurse and nutritionist colleagues.
- (4) To assist the teams in selecting or developing appropriate teaching materials for their own programs.

Methods used to meet the goals and objectives for the most part remain unchanged from previous LME courses. Details of specific course activities can be found in Appendices 3 and 4 (Course Schedule and Faculty and Staff List).

As in all LME courses, three basic methods of evaluation were utilized to assess the success level of the course:

- (1) To determine if the experience in San Diego modified the quantity and/or quality of the participants' knowledge about breastfeeding, short unannounced pre- and post-tests were given. Results of these tests suggest that participants' knowledge base was significantly increased at the completion of the four-week course. (Average scores rose from 42.5% to 66% correct answers, Appendix 5).

- (2) Individual session critiques were completed by participants for all 40 of the didactic sessions provided during the course. Participants were asked to rate the usefulness, quality and quantity of the presentation, as well as respond to whether the speaker and/or topic should be included in the future. The tabulated scores reflect a high level of satisfaction with the quality of the material presented as well as with the speakers themselves. The mean scores for both usefulness and quality were 4.7, using a scale of 0 to 5, with 5 being the highest possible score.
- (3) An evaluation form was given to participants at the end of the entire course to allow them an opportunity to comment on all elements of the course experience. The results of these evaluations are summarized by discipline and for the group in Appendix 6.

In general, based upon participant comments, the pre/post tests, session critiques and the overall course evaluations, the course appears to have been very well accepted and a valuable experience for all who attended.

II. Comments on Specific Program Components

Recruitment/Selection

Though only one of the four countries represented in this course is new to the LME Program (Zambia), five of the six teaching hospitals represented are new entries. (Mulago Hospital in Kampala, Uganda has been participating since 1988.)

For the most part, these six teams were appropriate in terms of multidisciplinary mix, commitment and quality. Senior level personnel, particularly from Guatemala and Pakistan were selected and there was a relatively large proportion of obstetricians (typically more difficult to obtain) in the group. It was unfortunate, however, that neither of the teams from Uganda had an obstetrician and that several members of the originally nominated Mulago Hospital team were unable to attend.

Similarly, it was unfortunate that the nurse member of the Guatemala team had to withdraw at the last minute because of a lack of English language capability.

The physician team members from Zambia were all relatively junior level and it will be interesting to see if this will be a handicap or a benefit. There certainly is something to be gained by reaching physicians early in their careers and potentially influencing their career decisions and thus their impact before other forces come into play and habits are formed. However, it is not clear whether these senior residents will be able to make change and influence policy as quickly or as effectively as perhaps more senior faculty could.

Education/Motivation

The LME course was designed to assist the participants in meeting their specific needs for technical information, clinical skills, and program planning and evaluation expertise. Specially selected guest faculty provided a wide variety of state-of-the-art information on the science of lactation, maternal and infant nutrition, lactation management, breastfeeding promotion, appropriate weaning practices and related topics.

One event worth special mention was the presentation by the Guatemalan team, at the entire group's request, on their Kangaroo Care Program. This type of cross pollination of ideas and experiences across disciplines and regions of the world is particularly exciting and gratifying.

Besides the formal classroom, clinical and field trip activities (Appendix 3), the LME course also includes several extracurricular experiences which are important components of the team development and educational processes. The camaraderie formed within and among teams is one reason for the success and sustainability of the teams' programs as they return to their countries using team synergy and motivational momentum to effect and maintain change.

During this particular course several visitors participated in course activities and contributed their experience and expertise to group discussions. Dr. Derrick and Patricia Jelliffe were able to present sessions on Breastfeeding and Child Survival and meet with the group over lunch during the first week of the course. Larry Casazza, representing PRITECH which co-sponsored the Zambian and Ugandan teams and Advanced Study Fellow, was able to make a presentation entitled Breastfeeding and Diarrheal Disease Control during the last week of the course. Fortunately Dr. Casazza was able to stay several days and meet with the PRITECH-related teams to discuss their progress and strategize funding and implementation.

As always when an Advanced Study Fellow participates in a LME course, the group benefitted from the experiences and expertise of someone (Dr. G. Mukasa) who has been through the course before, has participated in the LME Program over a period of several years, and is now developing plans and proposals for the development of a formal national breastfeeding program based on his accomplishments and the accomplishments of his colleagues over a period of time. The Fellowship provides the opportunity for teaching, leadership in group discussions, and involvement in the provision of technical assistance for program planning. The group and the Fellow both benefitted from these experiences.

Material Support

The formal course syllabus, including reading lists, was updated and improved for the course. Course participants found the syllabus helpful and easy to use. Each participant received a set of text books and each team received a reprint library of approximately 900 reprints. Reference lists by subject for all 900 articles were included in the course syllabus.

Program participation fees also allow each team to purchase relevant teaching materials such as slides, text books, video tapes, teaching dolls, and breast pumps for use in-country. Participants were also provided, as part of their course syllabus, with information on how to create good teaching slides and handouts, and suggestions on how to organize reprints, slides and related materials. Participants were urged to review and utilize this valuable information as they work on establishing and maintaining their collections of teaching resources.

Program Planning

An essential component of the LME course experience is the preparation and presentation of each team's plans for program implementation. Copies of these plans are included as Appendix 7.

The teams and Fellow formally presented their plans to an audience of Program faculty, staff and special guests on the final day of the course. As an important next step, they were urged

to share their plans with their supervisors, the USAID Mission, the Ministry of Health and others, as appropriate. Program participants are expected to pursue the implementation of their program plans upon returning home and to keep Wellstart faculty and staff informed of their progress through periodic communication.

III. Recommendations for the Future

These teams, some in partnership with teams from their respective countries which are already participating in the LME Program, have the potential to become powerful resources for national and regional breastfeeding promotion and protection efforts. The professional knowledge and skills, the materials and motivation, and the sense of teamwork acquired in San Diego can create a strong basis for implementing the short and long-range goals they have articulated. Building upon this groundwork of well trained, highly motivated professionals should be a priority so that momentum can be maintained and optimum outcome achieved.

The process of networking and communication which began between and among the participants in San Diego should also be built upon so that these resources of expertise can be adequately utilized and function as national working groups for the promotion and protection of breastfeeding. These participants, as they join with others who have already entered the Program or with colleagues who will enter the Program in the future, should be encouraged to continue to function as teams, and should be viewed as key resources for further activities in-country.

For example, the Guatemalan team was selected and entered into the LME Program as a critical step in the process of establishing a national, and ultimately regional, lactation management training center at INCAP. One of the team members, Dr. Rolando Cerezo, is in fact a part-time INCAP employee and the Guatemalan Social Security Hospital will be utilized as the clinical training site for the developing center.

In the case of Uganda, though the two institutions represented in this course will be working independently on implementation of their individual program plans, it is anticipated that their efforts and resources will be coordinated and incorporated into a national plan. This process was begun during the San Diego course experience through efforts made by the Advanced Study Fellow. His plans for a national center to be established at Mulago Hospital built upon discussions held with both teams and incorporate the individual program plans into his broader national plan.

Having two teams from one province of Pakistan (Peshawar) in San Diego at the same time provides an opportunity to link plans, activities, and resources within the province. It is hoped that through the relationships established during the San Diego course experience, as well as through the provincial breastfeeding steering committee, the outcome in Peshawar will be greater than the sum of the two individual institutional parts.

Continuing communication and follow-up are important components of the Wellstart Program. It is important that follow-up visits by Wellstart faculty be well coordinated with the teams' plans for program implementation so that maximum advantage of such visits can be achieved.

As these teams work to implement their program plans, it is hoped that agencies with a vested interest in the success of these worthwhile efforts such as the USAID Missions in-

country, governmental and non-governmental organizations such as INCAP and PRITECH, and international funding agencies, will lend their commitment and support to assure that this important initial investment will develop into long term, institutionalized teaching and clinical service programs.

APPENDIX 1

Participants

WELLSTART
Lactation Management Education Program
August 28 - September 20, 1991

PARTICIPANTS

GUATEMALA

Guatemala Social Security Hospital
Guatemala City, Guatemala

Dr. Erick Jacobo Alvarez Rodas
Obstetrician-Gynecologist

Dr. Rolando Figueroa de León
Chief of Newborn Services
Chief of Neonatal Intensive Care Unit

Dr. Rolando Cerezo Mulet
Neonatologist

ZAMBIA

University Teaching Hospital
Lusaka, Zambia

Dr. Dorothy Doyle Kavindele
Registrar, Post Graduate Student
Paediatric & Diarrhoea Training Unit (DTU)

Mrs. Margaret Mutale Mbelenga
Nurse-Midwife
NICU & Post Natal Wards

Dr. Beatrice Chifwelu Amadi
Senior Resident
Neonatal Intensive Care Unit (NICU)

Mrs. Molly Mazombwe Chisenga
Nurse-Midwife
Paediatric Department & DTU

Dr. Velepi Catherine Mtonga
Senior Resident
Department of Obstetrics & Gynaecology

UGANDA

Mulago Hospital, Makerere University Medical School
Kampala, Uganda

Mrs. Rose Mary Muwawu
Nurse, Assistant Health Visitor

Mrs. Edith N. Nshimye
Nurse-Midwife

Mbarara Hospital
Mbarara, Uganda

Mrs. Jocelyn Mbonimpa Tindiweegi
Nurse-Midwife

Dr. Edith Laura Kigyagi Busingye
Medical Officer - Paediatrics

Ms. Susan Keirungi
Registered Midwife

PAKISTAN

**Post-Graduate Medical Institute
Lady Reading Hospital
Peshawar, Pakistan**

**Dr. Shamim Sarwat Majid
Professor of Ob-Gyn**

**Dr. Mohammad Imran
Professor and Head
Department of Pediatrics**

**Ms. Begum Gulzar
Staff Nurse**

**Khyber Medical College
Hayat Shaheed Teaching Hospital
Peshawar, Pakistan**

**Dr. Lala Rukh
Professor of Ob-Gyn**

**Ms. Perveen Begum
Head Nurse
Nursery Unit**

**Dr. Mehr Taj Roghani
Professor of Pediatrics**

Advanced Study Fellow

**Dr. Gelasius K. Mukasa
Lecturer, Department of Paediatrics & Child Health
Mulago Hospital, Makerere University Medical School
Kampala, Uganda**

APPENDIX 2

Description of Advanced Study Fellowship

LACTATION MANAGEMENT ADVANCED STUDY FELLOWSHIP

I. OVERVIEW

Since its inception in 1983, the purpose of Wellstart's Lactation Management Education (LME) program has been to help create sustainable national and/or regional resources of expertise for training health care providers regarding the scientific aspects of human lactation and the application of this information to the provision of sound, scientifically based clinical care for breastfeeding mothers and babies. The basic approach utilized in the program has been to educate multidisciplinary teams of health care professionals from teaching hospitals and governmental health services from selected countries where breastfeeding promotion activities are underway. The teams, in turn, develop programs in their own institutions where further training can be carried out.

In order to strengthen these programs and enhance the probability of becoming a sustainable national resource, Wellstart has designed a two month Advanced Study Fellowship program for selected LME program participants who have already completed the basic four week course and who are moving into key leadership positions in the development of lactation management education programs in their own countries. The fellowship provides a variety of opportunities for in-depth study of the subject matter, for improving clinical skills, for strengthening teaching methods, and for examining issues related to developing lactation centers.

II. GOAL

The goal of the Lactation Management Advanced Study Fellowship is to contribute to the development of leaders for national and regional lactation management education programs in developing countries.

III. GENERAL OBJECTIVES

The fellowship is designed to strengthen the knowledge and skills of selected participants in five areas regarding human milk, lactation, and breastfeeding:

1. scientific fundamentals for the clinical management of successful breastfeeding
2. specific clinical techniques and procedures
3. teaching methods and materials development
4. program management
5. research and/or program evaluation methods

IV. FELLOWSHIP ACTIVITIES

Seven categories of activity will be arranged during the fellowship. These include the following:

1. *LME course participation.* Fellowships are arranged to coincide with a basic course and fellows will attend all seminar sessions. They will be expected to be familiar with the specific suggested readings and to review a minimum of two additional recommended references from the seminar list for each session. Selected sessions will be reviewed with Wellstart faculty assigned to attend that particular session.
2. *Wellstart clinical services.* Fellows will be scheduled to participate in patient care sessions with Wellstart faculty, both in clinic and hospital settings.
3. *Teaching assignments.* Fellows will participate in five types of teaching assignments. Fellows will:
 - a. Provide a presentation to the course participants of the fellow's own current lactation program activity.
 - b. Be the primary presenting speaker for one core topic session. The session will be critiqued by course participants and attending faculty.
 - c. Assist the Wellstart faculty during four group discussion sessions including:
 - case management
 - professional roles and responsibilities
 - twenty questions
 - culture and tradition
 - d. Assist participant teams with:
 - assigned small group clinical self study sessions
 - team program planning
 - materials review and selection
 - e. Participate as a member of the teaching team during the hospital rounds sessions scheduled during the course.
4. *Literature review.* Fellows will be expected to select a specific lactation/breastfeeding topic of particular interest to them and review at least 12 articles related to that topic from the current literature. A brief written review of each article using the Reprint Review form is to be submitted. These will be discussed with the Wellstart Fellowship Advisor.
5. *Development of a project or program plan.* During the fellowship, each fellow is expected to develop a program or special project plan which will be implemented after returning home. The intended program plan should be discussed initially with

the Wellstart Fellowship Advisor and Program Co-Directors and at intervals with the Fellowship Advisor during its preparation. The plan is to be completed and presented to the course participants during the program plan presentation session. A written version is to be submitted to Wellstart.

6. *Field trips.* Arrangements will be made for fellows to visit other agencies or facilities which have programs or activities with relevance to lactation management education. These may include a major human milk banking agency, a community hospital-based lactation support program, a university-based lactation service, and a human milk clinical research institute. Fellows will prepare a brief trip report describing each of these visits using the Fellowship Field Trip Report form.
7. *Special events as available.* Arrangements will be made, if at all possible, to allow fellows to participate in meetings or other events which are directly relevant to LME and occur at an appropriate time. For the February-March 1991 fellowship, for example, arrangements were made for participation in the annual meeting of the American Academy of Pediatrics, which was held in San Diego. A special six-hour session on lactation management was featured.

V. EVALUATION

Several tools will be used to evaluate the participants in this fellowship:

1. Faculty review.
2. Course participants' critique of the fellows' seminar session(s).
3. A review of the written reports prepared by the fellow of their program or project plan and of their field trip experiences.

VI. SUPERVISION

Fellowship participants will have supervision from all Wellstart full time faculty, but will be specifically and most closely guided by an assigned Fellowship Advisor.

FELLOWSHIP SCHEDULE: August 19 - October 7, 1991

OVERVIEW:

Week I See attached schedule

Activities of this week will include the following:

1. General orientation to program
2. Meeting with staff and faculty
3. Participation in Clinical Staff Meeting, Management Coordinating Committee, Housestaff Rounds, and clinical services
4. Discussion and selection of topic focus for:
 - a. seminar presentation
 - b. program or project plan
 - c. reference review
5. Instruction in use of ProCite to access Wellstart reference files
6. Review of Course syllabus
7. Preparation for field site visits
8. Review of audio-visual materials

Week II-V Lactation Management Education Course

Week VI Field site visits [Denver Lactation Program; The Best Beginnings Program, University of Kansas Medical Center, Kansas City; Texas Children's Nutrition Research Center, Houston; and USAID and USAID-funded projects (APHA, MotherCare, PRITECH, etc.), Washington, DC]

Week VII Complete all assignments and prepare for departure

BIOGRAPHICAL SKETCH

WELLSTART ADVANCED STUDY FELLOW

August 19 - October 7, 1991

Gelasius K. Mukasa, MD

Educational Background

Medical degree received in 1974 from Makerere University in Kampala, Uganda

Current Positions

Lecturer in Paediatrics and Child Health at Makerere University.

Head of the Newborn Special Care Unit at Mulago Hospital
Vice Chairperson of the Uganda Lactation Management and Education Team (LMET)

Dr. Mukasa participated in Wellstart's Lactation Management Education course in September of 1988, and since that time he and the other team members have been very active in organizing activities and mobilizing support for breastfeeding promotion in Uganda. In 1988 the Wellstart team founded the Uganda Lactation Management and Education Training Group, and under Dr. Mukasa's leadership this group will be working towards the establishment of a national breastfeeding management and education training center at Mulago Hospital.

Dr. Mukasa was instrumental in establishing the first lactation clinic in Africa. He has networked extensively with IBFAN Africa and Malaysia and has participated in several regional and international breastfeeding meetings. His post graduate training includes participation in several intensive courses of study including a WHO diarrhoea case management course in Lusaka, Zambia in 1990. He will be returning to the U.S. in November to present the results of his clinical research at the APHA annual meeting in Atlanta.

APPENDIX 3
Course Schedule

WELLSTART
Lactation Management Education Program
August 23 - September 20, 1991

COURSE SCHEDULE

Week 1

8/23/91

Monday Aug. 26	Tuesday Aug. 27	Wednesday Aug. 28	Thursday Aug. 29	Friday Aug. 30
<p>8:00 - 8:30 Escort to Wellstart and Tour of Facilities</p> <p>8:30 - 9:45 General Orientation to Program and Overview of Wellstart -R. Wester -J. Schooley</p> <p>10:00 - 1:00 Team Presentations</p>	<p>10:00 - 12:00 Breastfeeding and Child Survival, Part I -D. Jelliffe</p>	<p>8:30 - 9:45 Anatomy and Physiology of Lactation -N. Powers</p> <p>10:00 - 12:00 Management of Successful Breastfeeding -R. Wester -M. Kroeger</p>	<p>8:00 - 9:45 Tour of UCSD Medical Center -Faculty</p> <p>10:00 - 10:30 Orientation to Clinical Experiences -N. Powers -Faculty</p> <p>10:45 - 11:45 Breast Examination -M. Kroeger</p>	<p>8:00 - 10:00 Maternal Problems Impacting Successful Lactation and Breastfeeding -E. Creer</p> <p>10:00 - 1:00 Clinical Experiences/ Audiovisual Reviews</p> <p><i>Lactation Clinic (Clinic House)</i> Alvarez Amadi Cerezo Nshimye Roghani Tindiweegi</p> <p><i>Nutrition Counseling (Vicky's Office)</i> Figueroa Kavindele Keirungi</p> <p><i>Breast Exam Review (Classroom)</i> Mbelenga Imran Rukh Chisenga Mukasa</p> <p><i>Slide/Tape Set Review (Journal Room)</i> Murwawu Slusser Gulzar</p> <p><i>Video Tape Review (Library)</i> Busingye Begum Mtonga Majid</p>
	12:00 - 1:30 Lunch with Faculty and Staff	12:00 - 1:00 Lunch	11:45 - 1:00 Lunch	1:00 - 2:00 Lunch
	1:00 - 3:00 Breastfeeding and Child Survival, Part II -E.F.P. Jelliffe	1:00 - 3:00 Maternal Nutrition -V. Newman	1:00 - 2:30 Infant Problems Impacting Successful Lactation and Breastfeeding -R. Wester	2:00 - 4:30 Mother to infant Biochemical and Immunological Transfer Through Breastmilk -M. Hanosh
		3:00 - 4:00 Orientation to Program Planning Assignment -J. Schooley	2:45 - 5:00 Breastfeeding, Fertility, and Child Spacing -B. Winikoff	

Monday Sept. 2	Tuesday Sept. 3	Wednesday Sept. 4	Thursday Sept. 5	Friday Sept. 6
<p>L A B O R D A Y H O L I D A Y</p>	<p>8:30 - 9:45 Hospital Rounds (Classroom 8:15) Alvarez Amadi Nshimye Cerezo</p> <p>10:00 - 1:00 Clinical Experiences/ Audiovisual Reviews</p> <p><i>Lactation Clinic (Clinic House)</i> Figueroa Kavindele Keir ngi Mbelenga Imran Rukh</p> <p><i>Nutrition Counseling (Vicky's Office)</i> Alvarez Amadi Nshimye</p> <p><i>Breast Exam Review (Classroom)</i> Cerezo Roghani Majid Tindiweegi</p> <p><i>Slides/Tape Set Review (Journal Room)</i> Busingye Begum Mtonga Chisenga</p> <p><i>Video Tape Review (Library)</i> Muwawu Slusser Gulzar Mukasa</p>	<p>8:30 - 9:45 Hospital Rounds (Classroom 8:15) Figueroa Kavindele Keirungi Mbelenga Imran Roghani</p> <p>10:00 - 1:00 Clinical Experiences/ Audiovisual Reviews</p> <p><i>Lactation Clinic (Clinic House)</i> Chisenga Mukasa Majid Muwawu Slusser Gulzar</p> <p><i>Nutrition Counseling (Vicky's Office)</i> Busingye Begum Mtonga</p> <p><i>Breast Exam Review (Classroom)</i> Alvarez Amadi Nshimye Figueroa</p> <p><i>Slide/Tape Set Review (Journal Room)</i> Cerezo Kavindele Roghani Tindiweegi</p> <p><i>Video Tape Review (Library)</i> Mbelenga Imran Rukh Keirungi</p>	<p>8:00 - 9:00 Growth Patterns of Breastfed Infants -K. Dewey</p> <p>9:15 - 11:15 Effect of Maternal Nutrition on Milk Composition and Volume -K. Dewey</p> <p>11:30 - 1:00 Slow Gain/Insufficient Milk Syndrome -N. Powers</p>	<p>8:00 - 11:00 Comparative Lactation Field Trip to the San Diego Wild Animal Park -L. Killmar</p>
	<p>1:00 - 2:00 Lunch</p>	<p>1:00 - 2:00 Lunch</p>	<p>1:00 - 2:00 Lunch</p>	
	<p>2:00 - 5:00 Program Planning and Evaluation -A. Brownlee</p>	<p>2:00 - 2:30 Film: "Amazing Newborn"</p> <p>2:45 - 4:30 The Effect of Continuous Social Support During Labor on Perinatal Morbidity -M. Klaus</p> <p>4:45 - 6:00 Comparative Lactation -A. Naylor</p>	<p>2:00 - 6:00 Program Planning Workshops -E. Creer -W. Willis</p>	<p>11:00 - 6:00 Intercultural Orientation -Faculty</p>

Monday Sept. 9	Tuesday Sept. 10	Wednesday Sept. 11	Thursday Sept. 12	Friday Sept. 13
<p>8:30 - 9:45 Infant Nutrition and Weaning -V. Newman</p> <p>10:00 - 1:00 Clinical Experiences/ Audiovisual Reviews</p> <p><i>Lactation Clinic (Clinic House)</i> Busingye Begum Mtonga Keirungi Cerezo Roghani</p> <p><i>Nutrition Counseling (Vicky's Office)</i> Mukasa Majid Tindiweegi</p> <p><i>Breast Exam Review (Classroom)</i> Muwawu Slusser Gulzar Kavindele</p> <p><i>Slide/Tape Set Review (Journal Room)</i> Mbelenga Imran Rukh Figueroa</p> <p><i>Video Tape Review (Library)</i> Alvarez Amadi Nshimye Chisenga</p>	<p>8:30 - 9:45 Hospital Rounds (Classroom 8:15) Chisenga Mukasa Majid Tindiweegi Rukh</p> <p>10:00 - 11:00 Breastfeeding and Jaundice -N. Powers</p> <p>11:15 - 1:00 Drugs and Contaminants -P. Anderson</p>	<p>8:30 - 9:45 Hospital Rounds (Classroom 8:15) Muwawu Slusser Gulzar Busingye Begum Mtonga</p> <p>10:00 - 12:30 Clinical Experiences/ Audiovisual Reviews</p> <p><i>Lactation Clinic (Clinic House)</i> Mbelenga Imran Rukh Chisenga Mukasa Majid</p> <p><i>Nutrition Counseling (Vicky's Office)</i> Muwawu Slusser Gulzar</p> <p><i>Breast Exam Review (Classroom)</i> Busingye Begum Mtonga Keirungi</p> <p><i>Slide/Tape Set Review (Journal Room)</i> Alvarez Amadi Nshimye</p> <p><i>Video Tape Review (Library)</i> Cerezo Roghani Figueroa Tindiweegi Kavindele</p>	<p>8:00 - 9:30 Programs to Promote and Protect Breastfeeding -A. Naylor</p> <p>9:45 - 10:45 Lactation Management Education in Medical Training Programs -N. Powers -E. Creer -V. Newman</p> <p>11:00 - 12:30 Oral-Motor Dysfunction in Infants: Assessment and Intervention -K. Bouma</p>	<p>8:30 - 9:45 Oral-Motor Rounds (Classroom 8:15) Alvarez Amadi Nshimye Figueroa Cerezo Roghani Tindiweegi</p> <p>10:00 - 1:00 Clinical Experiences/ Standardized Patients</p> <p><i>Lactation Clinic (Clinic House)</i> Alvarez Amadi Nshimye Tindiweegi Figueroa Gulzar</p> <p><i>Standardized Patients (Classroom)</i> Mbelenga Imran Rukh Muwawu Slusser</p> <p><i>Nutrition Counseling (Vicky's Office)</i> Cerezo Roghani Chisenga</p> <p><i>Slide/Tape Set Review (Journal Room)</i> Keirungi Mukasa Majid</p> <p><i>Independent Study</i> Busingye Begum Mtonga Kavindele</p>
<p>1:00 - 2:00 Lunch</p>	<p>1:00 - 2:00 Lunch</p>	<p>12:30 - 1:30 Lunch</p>		<p>1:00 - 2:00 Lunch</p>
<p>2:00 - 5:30 Curriculum Design -L. Bruce</p>	<p>2:00 - 3:30 Growth Monitoring Programs -V. Newman</p> <p>3:45 - 5:00 Orientation to Standardized Patients -E. Creer -J. Schooley</p>	<p>1:30 - 4:00 Induced and Relactation -E. Jones -A. Naylor</p> <p>4:15 - 5:15 The Infant with Cleft Lip and/or Palate -E. Jones</p>	<p>1:00 - 5:00 Field Trip to ISSSTECALI Hospital, Tijuana, Mexico -E. Jones -G. Chong</p>	<p>2:00 - 6:00 Program Planning Workshops -E. Creer -W. Willis</p> <p><i> Fiesta on weekend!</i></p>

Monday Sept. 16	Tuesday Sept. 17	Wednesday Sept. 18	Thursday Sept. 19	Friday Sept. 20
<p>8:00 - 10:00 Human Milk for the Preterm Infant -R. Schanler</p> <p>10:15 - 12:15 Lactation Management for Mothers of Preterm Infants -N. Hurst</p>	<p>8:30 - 9:45 Oral-Motor Rounds (Classroom 8:15) Mbelenga Imran Rukh Kavindele Chisenga Mukasa Majid</p> <p>10:00 - 11:15 Contraindication and Controversies -A. Naylor</p> <p>11:30 - 1:00 Breastfeeding and Diarrheal Disease Control -L. Casazza</p>	<p>10:00 - 1:00 Standardized Patients</p> <p>Standardized Patients (Classroom) Figueroa Kavindele Keirungi Tindiweegi Chisenga</p> <p>Independent Study Alvarez Amadi Nshimye Cerezo Mbelenga Imran Rukh Roghani Muwawu Slusser Gulzar Mukasa Busingye Begum Mtonga Majid</p>	<p>8:30 - 9:45 Oral-Motor Rounds (Classroom 8:15) Muwawu Slusser Gulzar Keirungi Busingye Begum Mtonga</p> <p>10:00 - 1:00 Standardized Patients</p> <p>Standardized Patients (Classroom) Busingye Begum Mtonga Mukasa Majid Gulzar</p> <p>Independent Study Alvarez Amadi Nshimye Chisenga Cerezo Roghani Muwawu Tindiweegi Figueroa Kavindele Keirungi Slusser Mbelenga Imran Rukh</p>	<p>9:00 - 12:30 Team Program Plan Presentations -Faculty</p> <p>12:30 - 1:00 Film: "Breastfeeding: Protecting a Natural Resource"</p>
<p>12:15 - 2:30 Lunch</p>	<p>1:00 - 2:00 Lunch</p>	<p>1:00 - 2:00 Lunch</p>	<p>1:00 - 2:00 Lunch</p>	<p>1:00 - 2:00 Lunch</p>
<p>Cultural Traditions and Beliefs Relating to Infant Feeding -Faculty (During Lunch; Lunch provided)</p> <p>2:45 - 4:45 Professional Roles and Responsibilities on the Multidisciplinary Team -R. Wester -M. Kroeger -A. Naylor -M. Besser</p> <p>5:30 - 8:30 Teaching Resources Review and Selection Uganda and Guatemala</p>	<p>2:00 - 5:00 Clinical Experiences/ Standardized Patients</p> <p>Lactation Clinic (Clinic House) Busingye Begum Mtonga Muwawu Slusser Kavindele</p> <p>Standardized Patients (Classroom) Alvarez Amadi Nshimye Cerezo Roghani</p> <p>Nutrition Counseling (Vicky's Office) Mbelenga Imran Rukh</p> <p>Independent Study Chisenga Mukasa Majid Tindiweegi Figueroa Keirungi Gulzar</p> <p>5:30 - 8:30 Teaching Resources Review and Selection Pakistan and Zambia</p>	<p>2:00 - 3:30 Case Management Review Session -R. Wester</p> <p>3:45 - 5:45 Consultant's Report Seminar (Review of 20 Questions Assignment) -A. Naylor -R. Wester</p>	<p>2:00 - 4:00 Breastfeeding and Women's Work -J. Leslie</p> <p>4:15 - 5:30 Formula Marketing and the WHO Code -J. Schooley -A. Naylor -E. Creer</p>	<p>2:00 - 4:00 Administrative Matters</p> <p>7:00 - 10:00 Closing Ceremonies and Farewell Banquet</p>

APPENDIX 4
Faculty and Staff List

WELLSTART
Lactation Management Education Program
August 28 - September 20, 1991

FACULTY AND STAFF

Wellstart Core Faculty

Ann Brownlee, PhD
Field Services/Evaluation Coordinator

Nancy Powers, MD, FAAP
Director, Professional Services

Elizabeth Creer, FNP, MPH
Family Nurse Practitioner

Wendelin Slusser, MD,MS
Pediatrician

Mary Kroeger, RN, CNM, MPH
Nurse-Midwife

Lois Scott, RN
Lactation Specialist

Audrey Naylor, MD, DrPH, FAAP
Co-Director and President

Ruth Wester, RN, BA, CPNP
Co-Director and Vice-President

Vicky Newman, RD, MS
Perinatal Nutritionist

Adjunct Faculty

Philip Anderson, PharmD
Director, Drug Information Service
UCSD Medical Center
San Diego, California

Kathryn G. Dewey, PhD
Associate Professor, Department of Nutrition
Associate Director of the Program for
International Nutrition
University of California, Davis
Davis, California

Mitchell Besser, MD
Co-Director, Birthplace
Assistant Clinical Professor
Division of MCH
San Diego State University
San Diego, California

Margit Hamosh, PhD
Chief, Developmental Biology/Nutrition
Georgetown University Medical Center
Washington, DC

Katheryn J. Bouma, OTR
Occupational Therapist
UCSD Medical Center
San Diego, California

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Texas Children's Hospital
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Program for Appropriate Technology in
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Population and Family Health Division
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Los Angeles, California

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PRITECH
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Gabriel Chong, MD
Director
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Tijuana, Mexico

Elizabeth Jones, RD, MPH, EdD
Pediatric Nutrition Consultant
San Diego, California

21

Larry Killmar
Curator of Mammals
San Diego Wild Animal Park
Escondido, California

Marshall Klaus, MD
Adjunct Professor of Pediatrics
University of California, San Francisco
Director of Academic Affairs
Oakland Children's Hospital
Oakland, California

Joanne Leslie, ScD
Population and Family Health Division
School of Public Health
University of California, Los Angeles
Los Angeles, California

Administrative Staff

Cynthia Collins
Staff Assistant

Lisa Daigle
Financial Manager

Pat Faucher, MPH
Part-time Assistant

Kathleen Finn, MA
Administrative Services Director

Patricia Gage, MA, RD
Staff Assistant

Carol Guenther
Word Processor

Ingrid Gulve
MCH Project Secretary

Translators

Momy Escalona

Richard Schanler, MD
Associate Professor of Pediatrics
Baylor College of Medicine, and
Investigator, Children's Nutrition Research
Center
Houston, Texas

Winnie Willis, DSC
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Division of Maternal & Child Health
Graduate School of Public Health
San Diego, California

Beverly Winikoff, MD, MPH
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The Population Council
New York, New York

Monica King
Education Program Assistant

Bruny Lopez
Clinical Secretary

Lynn Nelson
Accounting Assistant

Janine Schooley, MPH
Director, Education Program Services

Marlene Turpin
Medical Biller/Secretary

Gail Ugarte, RD, MPH
MCH Project Coordinator

Susan Walker
Administrative Assistant

Judy McLean

APPENDIX 5

Pre and Post Test Scores Summary

WELLSTART
Lactation Management Education Program

August 26 - September 20, 1991

PRE- AND POST-TEST SUMMARY

Team	Disc.	Name	Pre-Test				Post-Test				Difference Between Pre- and Post-Test
			# Incorrect	# Omitted	# Correct	% Correct	# Incorrect	# Omitted	# Correct	% Correct	
GS	Ob	Erick Alvarez	6	0	9	60.00	3	0	12	80.00	20.00
UT	Ped	Beatrice Amadi	6	1	8	53.33	6	0	9	60.00	6.67
KM	N	Perveen Begum	5	1	9	60.00	4	0	11	73.33	13.33
MB	Ped	Edith Busingye	10	0	5	33.33	7	0	8	53.33	20.00
GS	Ped	Rolando Cerezo	7	1	7	46.67	4	0	11	73.33	26.66
UT	N	Molly Chisenga	6	4	5	33.33	4	0	11	73.33	40.00
GS	Ped	Rolando Figueroa	7	1	7	46.67	1	0	14	93.33	46.66
PG	N	Begum Gulzar	6	0	9	60.00	4	0	11	73.33	13.33
PG	Ped	Mohammad Imran	5	0	10	66.67	3	0	12	80.00	13.33
UT	Ped	Dorothy Kavindele	9	0	6	40.00	5	0	10	66.67	26.67
MB	N	Susan Keirungi	10	0	5	33.33	11	0	4	26.67	-6.66
PG	Ob	Samim Majid	7	0	8	53.33	5	0	10	66.67	13.34
KM	Ob	Lala Rukh Malik	8	0	7	46.67	5	0	10	66.67	20.00
UT	N	Margaret Mbelenga	6	8	1	6.67	5	1	9	60.00	53.33
UT	Ob	Velepi Mtonga	8	3	4	26.67	4	0	11	73.33	46.66
MM	N	Rose Mary Muwawu	10	1	4	26.67	9	0	6	40.00	13.33
MM	N	Edith Nshimye	11	0	4	26.67	5	0	10	66.67	40.00
KM	Ped	Mehr Taj Roghani	7	0	8	53.33	6	0	9	60.00	6.67
MB	N	Jocelyn Tindiweegi	10	0	5	33.33	5	0	10	66.67	33.34
GROUP AVERAGE			7.58	1.05	6.37	42.46	5.05	0.05	9.89	65.96	23.51

GS: Guatemala Social Security Hospital, Guatemala City, Guatemala
 KM: Khyber Medical College, Hayat Shaheed Teaching Hospital, Peshawar, Pakistan
 MB: Mbarara Hospital, Mbarara, Uganda
 MM: Mulago Hospital, Makerere University Medical School, Kampala, Uganda
 PG: Post-Graduate Medical Institute, Lady Reading Hospital, Peshawar, Pakistan
 UT: University Teaching Hospital, Lusaka, Zambia

N: Nurse or Nurse/Midwife
 Ob: Obstetrician/Gynecologist
 Ped: Pediatrician or Neonatologist

Comparison of Scores by Team and Discipline

Disc	Team	Pre-Test (% Correct)							Post-Test (% Correct)							Difference Between Pre- and Post-Test Scores								
		GS	KM	MB	MM	PG	UT	Disc. Avg.	GS	KM	MB	MM	PG	UT	Disc. Avg.	GS	KM	MB	MM	PG	UT	Disc. Avg.		
		Nurse (8)		60	33	27	60	33	35.0		73	27	40	73	73	60.0		+13	-6	+13	+13	+40	24.9	
Pediatrician (7)		47	53	33		67	53	48.6		73	60	53		80	60	69.4		+26	+7	+20		+13	+7	20.9
Obstetrician (4)		60	47			53	27	46.8		80	60			67	67	68.5		+46	+13			+14	+40	21.8
Total Physician Average by Team		51.3	50.0	33.0		60.0	40.0		82.0	60.0	53.0		73.5	64.7		30.7	10.0	20.0			13.5	24.7		
Total Team Average		51.3	53.3	33.0	27.0	60.0	32.0		82.0	64.3	49.0	53.5	73.3	65.4		30.7	11.0	15.7	26.5	13.3	33.4			

APPENDIX 6
Course Evaluation Summary

WELLSTART
Lactation Management Education Program
August 26-September 20, 1991

SUMMARY OF OVERALL COURSE EVALUATION

SCALES USED FOR OVERALL COURSE EVALUATION RATINGS

- | | | | |
|-----------------------|---------------------------------------------------|---------------------------|-------------------------------------------------------------|
| 1 - Usefulness | 5 = very useful
0 = not useful | 5 - Ease of Speaking | 5 = very easy to speak English
0 = hard to speak English |
| 2 - Ease of Reading | 5 = easy to read
0 = hard to read | 6 - Hotel Adequacy | 5 = very adequate
0 = not adequate |
| 3 - Helpfulness | 5 = very helpful
0 = not helpful | 7 - Increase in Knowledge | 5 = very much
0 = not at all |
| 4 - Understandability | 5 = very understandable
0 = not understandable | | |

A total of nineteen evaluations were completed on the final day of the course with the following breakdown of disciplines indicated: eight nurses or nurse-midwives; seven pediatricians or neonatologists; and four obstetricians.

	Nurs	Ped	Ob	Physician		Group	
				Avg	Tot	Avg	Tot
SEMINARS							
2. Program Planning Workshops							
Usefulness ¹	5.0	4.9	4.5	4.7		4.8	
# of sessions: not enough	2	2	2		4		6
just right	2	3	2		5		7
too many							
not answered	4	2			2		6
CLINICAL EXPERIENCES							
3. Tour of UCSD							
Usefulness ¹	4.6	4.1	4.0	4.1		4.3	
4. Hospital Rounds							
Usefulness ¹	4.5	4.9	4.5	4.7		4.6	
# of sessions: not enough	1	5	3		8		9
just right	4	2	1		3		7
too many							
not answered	3						3
# of patients: not enough	3	6	3		9		12
just right		1	1		2		2
too many							
not answered	5						5

	Nurs	Ped	Ob	Physician		Group	
				Avg	Tot	Avg	Tot
5. Oral-Motor Assessment Rounds							
Usefulness ¹	4.6	5.0	4.5	4.8		4.7	
# of sessions: not enough	2	4	3		7		9
just right	3	3	1		4		7
too many							
not answered	3						3
# of patients: not enough	1	3	4		7		8
just right		2	4		4		6
too many							
not answered	5						5
6. Lactation Clinic							
Usefulness ¹	5.0	4.7	4.5	4.6		4.8	
# of sessions: not enough	1	4	3		7		8
just right	5	3	1		4		9
too many							
not answered	2						2
# of patients: not enough	2	5	3		8		10
just right	3	2	1		3		6
too many							
not answered	3						3
7. Standardized Patients							
Usefulness ¹	4.7	4.4	4.8	4.6		4.6	
# of sessions: not enough	3	3			3		6
just right	3	4	3		7		10
too many							
not answered	2		1		1		3
# of patients: not enough	2	2			2		4
just right	2	4	3		7		9
too many							
not answered	4	1	1		2		6

	Nurs	Ped	Ob	Physician		Group	
				Avg	Tot	Avg	Tot
8. Nutrition Counseling							
Usefulness ¹	4.8	4.7	4.8	4.7		4.5	
# of sessions: not enough	3	3	3		6		9
just right	3	4	1		5		8
too many							
not answered	2						2
# of patients: not enough	4	4	2		6		10
just right	2	3	1		4		6
too many							
not answered	2	1			1		3
9. Breast Exam Review Session							
Usefulness ¹	4.9	4.8	5.0	4.9		4.9	
AUDIO VISUAL REVIEWS							
10. Video Tape Review Session							
Usefulness ¹	4.7	4.2	4.0	4.1		4.4	
11. Slide Set Review Session							
Usefulness ¹	4.6	3.8	4.3	4.0		4.2	
FIELD TRIPS							
12. Tijuana Children's Hospital, ISSSTECALI							
Usefulness ¹	4.0	4.2	3.3	3.9		3.9	
13. San Diego Wild Animal Park							
Usefulness ¹	4.7	4.1	4.8	4.4		4.5	
VIDEOTAPES SHOWN DURING COURSE							
14. M. Klaus, "Amazing Newborn"							
Usefulness ¹	4.8	4.4	5.0	4.6		4.7	
15. B. Bates, "Breasts & Axillae"							
Usefulness ¹	5.0	4.4	4.6	4.5		4.7	
16. IISNFP, "Breastfeeding: Protecting a Natural Resource"							
Usefulness ¹	5.0	5.0	4.5	4.8		4.9	

	Nurs	Ped	Ob	Physician		Group	
				Avg	Tot	Avg	Tot
READING ASSIGNMENTS							
17. Lawrence, Breastfeeding — A Guide for the Medical Profession (physicians only)							
Did not read	2	1	2		3		5
Length: too long		1	1		2		2
just right	2	4	1		5		7
too short	2						2
not answered	2	1			1		3
Ease of reading ²	3.8	5.0	5.0	5.0		4.5	
Usefulness ¹	4.6	5.0	4.5	4.9		4.8	
Use in future? yes	6	4	2		6		12
no							
not answered							
18. Akre (WHO), Infant Feeding — The Physiological Basis							
Did not read	4	5	2		7		11
Length: too long			1		1		1
just right	2	1	1		2		4
too short	1						1
not answered	1	1			1		1
Ease of reading ²	4.0	4.5	4.5	4.5		4.3	
Usefulness ¹	4.7	4.5	4.5	4.5		4.6	
Use in future? yes	4	2	2		4		8
no							
not answered							
19. APHA, Legislation & Policies to Support Maternal and Child Nutrition, Report No. 6							
Did not read	4	5	3		8		12
Length: too long	1	1			1		2
just right	1	1	1		2		3
too short	1						1
not answered	1						1
Ease of reading ²	3.8	4.5	4.0	4.3		4.0	
Usefulness ¹	4.3	4.0	4.0	4.0		4.2	
Use in future? yes	2	2	1		3		5
no							
no answer	2						2

	Nurs	Ped	Ob	Physician		Group	
				Avg	Tot	Avg	Tot
20. Baer & Winikoff, Breastfeeding - Program, Policy, and Research Issues							
Did not read	6	3	2		5		11
Length: too long							
just right	2	3	2		5		7
too short							
not answered		1			1		1
Ease of reading ²	4.0	4.8	4.0	4.5		4.4	
Usefulness ¹	4.0	4.5	4.0	4.3		4.3	
Use in future? yes	2	4	2		6		8
no							
not answered							
21. Brownlee, Breastfeeding, Weaning, and Nutrition: The Behavioral Issues							
Did not read	6	5	2		7		13
Length: too long			1		1		1
just right	2	2			2		4
too short							
not answered			1		1		1
Ease of reading ²	4.5	4.5	4.5	4.5		4.5	
Usefulness ¹	4.0	4.5	4.5	4.5		4.3	
Use in future? yes	2	2	2		4		6
no							
not answered							
22. Huffman and Combest, Breastfeeding - A Prevention and Treatment Necessity for Diarrhea							
Did not read	2	2	2		4		6
Length: too long		1	1		2		2
just right	3	4	1		5		8
too short	1						1
not answered	2						2
Ease of reading ²	4.2	4.8	4.5	4.7		4.5	
Usefulness ¹	4.8	4.8	4.0	4.5		4.6	
Use in future? yes	5	5	2		7		12
no							
not answered	1						1

	Nurs	Ped	Ob	Physician		Group	
				Avg	Tot	Avg	Tot
23. IISNFP, Guidelines for Breastfeeding in Family Planning and Child Survival Programs							
Did not read	4	4	2		6		10
Length: too long	1		1		1		2
just right	2	3	1		4		6
too short							
not answered	1						1
Ease of reading ²	5.0	5.0	4.5	4.8		4.9	
Usefulness ¹	4.9	4.3	5.0	4.6		4.7	
Use in future? yes	4	3	2		5		9
no							
not answered							
24. IISNFP, Breastfeeding — Protecting a Natural Resource							
Did not read	6	3	3		6		12
Length: too long							
just right	2	4	1		5		7
too short							
not answered							
Ease of reading ²	5.0	4.8	4.0	4.6		4.7	
Usefulness ¹		4.8	4.0	4.6		4.6	
Use in future? yes	2	3	1		4		6
no							
not answered		1			1		1
25. IRD/Westinghouse, Child Survival: Risks and the Road to Health							
Did not read	5	4	2		6		11
Length: too long		1			1		1
just right	3	2	1		3		6
too short							
not answered			1		1		1
Ease of reading ²	4.0	5.0	4.0	4.6		4.4	
Usefulness ¹	4.3	5.0	4.5	4.8		4.6	
Use in future? yes	3	3	2		5		8
no							
not answered							

	Nurs	Ped	Ob	Physician		Group	
				Avg	Tot	Avg	Tot
26. Institute of Medicine, Nutrition During Lactation							
Did not read	3	3	2		5		8
Length: too long	1	1	1		2		3
just right	3	3	1		4		3
too short							
not answered	1						1
Ease of reading ²	4.4	4.8	3.5	4.3		4.4	
Usefulness ¹	4.5	5.0	4.5	4.8		4.7	
Use in future? yes	5	4	2		6		11
no							
not answered							
27. Institute of Medicine, Nutrition During Lactation - Summary, Conclusions, and Recommendations							
Did not read	6	4	2		6		12
Length: too long		1			1		1
just right	2	2	1		3		5
too short							
not answered			1		1		1
Ease of reading ²	4.5	5.0	3.5	4.4		4.4	
Usefulness ¹	4.5	4.7	4.5	4.6		4.6	
Use in future? yes	2	3	2		5		7
no							
not answered							
28. Institute of Medicine, Summary - Nutrition During Pregnancy							
Did not read	5	5	2		7		12
Length: too long							
just right	3	2	1		3		6
too short			1		1		1
not answered							
Ease of reading ²	4.0	4.5	4.0	4.3		4.1	
Usefulness ¹	3.0	4.0	4.0	4.0		3.8	
Use in future? yes	3	2	2		4		7
no							
not answered							

	Nurs	Ped	Ob	Physician		Group	
				Avg	Tot	Avg	Tot
29. IOCU, Protecting Infant Health: A Health Workers' Guide to the International Code of Marketing of Breastmilk Substitutes							
Did not read	5	3	3		3		8
Length: too long		1			1		1
just right	3	3	1		4		7
too short							
not answered							
Ease of reading ²	3.7	4.8	4.0	4.6		4.3	
Usefulness ¹	4.5	4.5	5.6	4.6		4.6	
Use in future? yes	3	4	1		5		8
no							
not answered							
30. IPPF, Breastfeeding, Fertility & Contraception							
Did not read	6	6	2		7		13
Length: too long							
just right		2	1		3		3
too short			1		1		1
not answered	2						2
Ease of reading ²	4.9	5.0	5.0	5.0		5.0	
Usefulness ¹	4.9	5.0	5.0	5.0		5.0	
Use in future? yes	2	1	1		2		4
no							
not answered		1	1		2		2
31. NCI, Breast Exams — What You Should Know							
Did not read	4	3	2		5		9
Length: too long			1		1		1
just right	4	4	1		5		9
too short							
not answered							
Ease of reading ²	4.7	5.0	4.5	4.8		4.8	
Usefulness ¹	4.6	5.0	4.5	4.8		4.8	
Use in future? yes	4	4	1		5		9
no							
not answered			1		1		1

	Nurs	Ped	Ob	Physician		Group	
				Avg	Tot	Avg	Tot
32. NCI, What You Need to Know About Breast Cancer							
Did not read	5	6	2		8		13
Length: too long	1						1
just right	2	1			1		3
too short			2		2		2
not answered							
Ease of reading ²	4.3	5.0	4.5	4.7		4.5	
Usefulness ¹	4.5	4.0	4.5	4.3		4.4	
Use in future? yes	3	1	2		3		6
no							
not answered							
33. The Population Council, Breastfeeding — A Nurse's Guide							
Did not read	5	6	4		10		15
Length: too long							
just right	3	1			1		4
too short							
not answered							
Ease of reading ²	4.7	5.0		5.0		4.8	
Usefulness ¹	4.5	4.0		4.0		4.3	
Use in future? yes	3	1			1		4
no							
not answered							
34. Royal College of Midwives, Successful Breastfeeding: A Practical Guide for Mothers and Midwives and Others Supporting Breastfeeding Mothers							
Did not read	6	5	4		9		15
Length: too long							
just right	1	2			2		3
too short							
not answered	1						1
Ease of reading ²	4.0	4.5		4.5		4.3	
Usefulness ¹	5.0	4.5		4.5		4.8	
Use in future? yes	2	2			2		4
no							
not answered							

	Nurs	Ped	Ob	Physician		Group	
				Avg	Tot	Avg	Tot
35. UNICEF, All for Health							
Did not read	7	3	3		6		13
Length: too long		2	1		3		3
just right	1	2			2		3
too short							
not answered							
Ease of reading ²	3.0	4.5	4.0	4.4		4.2	
Usefulness ¹	3.0	4.5	4.0	4.4		4.2	
Use in future? yes	1	3	1		4		5
no							
not answered		1			1		1
36. UNICEF/WHO/UNESCO, Facts for Life							
Did not read	7	4	3		7		14
Length: too long							
just right		3	1		4		4
too short							
not answered	1						
Ease of reading ²	4.0	5.0	5.0	5.0		4.8	
Usefulness ¹	4.0	5.0	5.0	5.0		4.8	
Use in future? yes	1	3			3		4
no							
not answered			1		1		1
37. UNICEF, State of the World's Children 1991							
Did not read	5	1	2		3		8
Length: too long		1	1		2		2
just right	3	3	1		4		7
too short							
not answered		2			2		2
Ease of reading ²	4.0	4.8	4.5	4.8		4.5	
Usefulness ¹	5.0	4.8	4.5	4.8		4.8	
Use in future? yes	3	6	2		8		11
no							
not answered							

	Nurs	Ped	Ob	Physician		Group	
				Avg	Tot	Avg	Tot
38. USDHHS, Report of the Surgeon General's Workshop on Breastfeeding and Human Lactation							
Did not read	7	7	4		11		18
Length: too long							
just right	1						1
too short							
not answered							
Ease of reading ²							
Usefulness ¹	4.0					4.0	
Use in future? yes	1						1
no							
not answered							
39. Winikoff, Semeraro & Zimmerman, Contraception During Breastfeeding. A Clinician's Sourcebook							
Did not read	8	4	2		6		14
Length: too long							
just right		3	2		5		5
too short							
not answered							
Ease of reading ²		4.7	4.5	4.6		4.6	
Usefulness ¹		5.0	4.5	4.8		4.8	
Use in future? yes		3	2		5		5
no							
not answered							
40. WHO, International Code of Marketing of Breastmilk Substitutes							
Did not read	5	1	2		3		8
Length: too long		1	1		2		2
just right	2	5	1		6		8
too short							
not answered	1						1
Ease of reading ²	4.3	5.0	4.0	4.8		4.6	
Usefulness ¹	4.0	4.7	4.0	4.5		4.4	
Use in future? yes	2	6	1		7		9
no			1		1		1
not answered	1						1

	Nurs	Ped	Ob	Physician		Group	
				Avg	Tot	Avg	Tot
41. WHO/UNICEF, Protecting, Promoting & Supporting Breastfeeding: the Special Role of Maternity Services							
Did not read	6	4	3		7		13
Length: too long			1		1		1
just right	1	2			2		3
too short	1						1
not answered		1			1		1
Ease of reading ²	4.5	4.7	4.0	4.5		4.5	
Usefulness ¹	4.5	5.0	5.0	5.0		4.8	
Use in future? yes	2	2			2		4
no							
not answered		1	1		2		2
42. WHO, The Growth Chart — A Tool for Use in Infant and Child Health Care							
Did not read	5	2	4		6		11
Length: too long							
just right	2	5			5		7
too short							
not answered	1						1
Ease of reading ²	4.3	4.2		4.2		4.2	
Usefulness ¹	4.6	4.4		4.4		4.5	
Use in future? yes	3	5			5		8
no							
not answered							
43. WHO, Weaning from Breast Milk to Family Food. A Guide for Health and Community Workers							
Did not read	7	5	3		8		15
Length: too long		1			1		1
just right	1	1	1		2		3
too short							
not answered							
Ease of reading ²	2.0	5.0	5.0	5.0		4.3	
Usefulness ¹	2.0	5.0	5.0	5.0		4.3	
Use in future? yes	1	2	1		3		4
no							
not answered							

	Nurs	Ped	Ob	Physician		Group	
				Avg	Tot	Avg	Tot
44. WHO, Women, Work & Breastfeeding (draft)							
Did not read	6	5	3		8		14
Length: too long	1	1			1		1
just right	1	1	1		2		3
too short							
not answered							
Ease of reading ²	1.8	4.5	4.0	4.3		3.3	
Usefulness ¹	3.0	3.5	4.0	3.7		3.4	
Use in future? yes	1	2	1		3		4
no							
not answered	1						
45. Worthington-Roberts & Williams, Nutrition in Pregnancy & Lactation							
Did not read	7	5	4		9		16
Length: too long							
just right	1	2			2		3
too short							
not answered							
Ease of reading ²	4.0	5.0		5.0		4.7	
Usefulness ¹	4.0	5.0		5.0		4.7	
Use in future? yes	1	2			2		3
no							
not answered							
46. Team Reprint Collection							
Did not read	7	2	2		4		11
Length: too long		2	1		3		3
just right		2	1		3		3
too short							
not answered	1	1			1		2
Ease of reading ²	5.0	4.4	4.5	4.4		4.5	
Usefulness ¹	5.0	5.0	5.0	5.0		5.0	
Use in future? yes	1	5	2		7		8
no							
not answered							

	Nurs	Ped	Ob	Physician		Group	
				Avg	Tot	Avg	Tot
MISCELLANEOUS IMPORTANT MATTERS							
47. Course Syllabus							
Ease of reading ²	4.3	5.0	4.8	4.9		4.7	
Usefulness ¹	5.0	5.0	4.8	4.9		4.9	
48. The English Language							
Understandability ¹	4.0	5.0	4.8	4.9		4.6	
Ease of reading ²	4.6	5.0	4.8	4.9		4.8	
Ease of Speaking ⁵	3.8	4.4	4.8	4.6		4.3	
49. Hotel Accommodations							
Adequacy ⁶	5.0	4.9	5.0	4.9		4.9	
Use in future? ⁷ yes	5	6	4		10		15
no							
not answered	3	1			1		4
50. Local transportation							
Buses	adequate	4	3	3		6	10
	not adequate						
	not answered	4	4	1		5	9
Taxis	adequate		3	2		5	5
	not adequate	1					1
	not answered	7	4	2		6	13
Hotel van	adequate	6	6	4	10		16
	not adequate						
	not answered	2	1		1		3
OVERALL EVALUATION							
51. Usefulness of providing this program to multidisciplinary teams ¹	5.0	5.0	4.5	4.8		4.9	
52. Increase in knowledge ⁷	5.0	5.0	4.3	4.8		4.9	

	Nurs	Ped	Ob	Physician		Group	
				Avg	Tot	Avg	Tot
53. Recommend this program be provided for other health professionals from developing nations	7	6	4		10		17
yes							
no							
not answered	1	1			1		2
General rating							
excellent	7	5	3		8		15
very good	1	1			1		2
good			1		1		1
fair							
poor							
not answered		1			1		1

APPENDIX 7
Team Program Plans

PROGRAM PLAN

Lactation Management Education and Breastfeeding Promotion

for

Guatemala

TEAM: **Dr. Erick Jacobo Alvarez Rodas**
 Dr. Rolando Cerezo Mulet
 Dr. Rolando Figueroa de León



GUATEMALA

POPULATION: 9.2 MILLIONS

BIRTH RATE: 40 X 1000

(360,000/YEAR)

MORTALITY RATE: 56 X 1000

(20,608/YEAR)

MOTHER-INFANT

POPULATION: 65 %

BREASTFEEDING INCIDENCE:

RURAL: 83.4% URBAN: 70.4%

EXCLUSIVE: < 5%

SOCIAL SECURITY BREASTFEEDING PROGRAM

INTRODUCTION

THE GUATEMALAN SOCIAL SECURITY OB-GYN HOSPITAL OFFERS MATERNAL-INFANT ASSIST^aANCE TO WOMEN OF LOW ECONOMIC STATUS; ONLY 80% SHOWS UP FOR ANTENATAL CARE, A HIGH INCIDENCE (ABOUT 60%) WILL COME AFTER THE 28th WEEK OF GESTATION; HOWEVER THE BREASTFEEDING PROMOTION IS POOR.

THERE ARE 45 LIVE BIRTHS A DAY WITH A 15% OF C-SECTION DELIVERIES, EVEN WHEN ROOMING-IN WAS ESTABLISHED 15 YEARS AGO, THERE ISN'T IMMEDIATE POST DELIVERY MOTHER INFANT CONTACT, AND BREASTFEEDING SUPPLEMENTATION HAS NOT DISSAPPEARED ENTIRELY.

THE INSTITUTION HAS BREASTFEEDING POLICIES BUT THERE ARE NOT REALLY FULLFILLED, BECAUSE THERE HAS BEEN A FAILURE IN TRAINING. THE HOSPITAL'S STAFF, NURSES, PEDIATRICIANS, AND OB RESIDENTS RECEIVE POOR BREASTFEEDING EDUCATION.

AS HAS BEEN ESTABLISHED ABOVE, WE WILL EMPHASIZE IN THESE FOUR ASPECTS:

1. LOW EARLY CONTACT
2. NO SUPPLEMENTS
3. LOW PROMOTION
4. LOW PROFFESIONAL EDUCATION

**SOCIAL SECURITY BREASTFEEDING PROGRAM
OBJECTIVES**

GENERAL

1. BY THE END OF THE FIRST SIX MONTHS OF THE PROGRAM THE KNOWLEDGE, ATTITUDES, AND PRACTICES OF 80% OF HEALTH PROFESSIONALS WILL BE CHANGED.
2. BY THE END OF THE FIRST YEAR OF THE PROGRAM 40% OF THE MOTHERS WILL BE EXCLUSIVELY BREASTFEEDING THEIR BABIES.
3. BY THE END OF THE FIRST YEAR OF THE PROGRAM THE KNOWLEDGE, ATTITUDES AND PRACTICES OF 80% OF THE MOTHERS WILL SHOW AN INCREASE IN A POSITIVE CHANGES TOWARD BREASTFEEDING.
4. BY THE END OF THE FIRST YEAR OF THE PROGRAM THE GOAL IS A CENTER WHO WILL PROVIDE TECHNICAL ASSISTENCE TO HEALTH PROFESSIONALS IN THE DEVELOPMENT OF BREASTFEEDING COMMUNICATIONS AND INTERVENTIONS STRATEGIES IN GUATEMALA.
5. BY THE END OF THE SECOND YEAR WILL CONVERT THE NATIONAL CENTER INTO A REGIONAL CENTER FOR THE OTHER CENTRAL AMERICAN COUNTRIES AND PANAMA.

SPECIFICS

IMPROVE:

1. EDUCATION ON CHILD REARING
2. NUTRITION EDUCATION
3. AVOID UNNECESSARY MEDICATION
4. ENCOURAGE NORMAL DELIVERY
5. NO PRELACTEAL FEEDING
6. EARLY MOTHER-INFANT CONTACT
7. EDUCATION

45

**SOCIAL SECURITY BREASTFEEDING PROGRAM
ORGANIZATION AND STAFFING**

I. LOW EARLY CONTACT

ORGANIZATION	STAFF	METHODOLOGY	ORGANISM INVOLVED
PHYSICAL AREA CHANGES	-HOSP. DIRECTOR -ADMINISTRATOR -ENGINEERING	REMODELING PHYSICAL AREA	IGSS UNICEF
CHANGE ATTITUDES AND PRACTICES IN HEALTH WORKERS OF THE DELIVERY ROOM	-MOTHER-INFANT TEACHING STAFF -HOPS. DIRECTOR -ADMINISTRATOR	WORSHOPS	IGSS

II. NO SUPPLEMENTATION

NO BOTTLES	-ADMINISTRATOR -MILK BANK STAFF	BUY NO MORE BOTTLES	IGSS
CHANGE ATTITUDES AND PRACTICES IN NURSES	-TEACHING STAFF	WORSHOPS	IGSS

III. LOW PROMOTION

TEACHING MATERIALS	-CONAPLAN -LECHE LEAGUE -IGSS PUBLIC RELATIONSHIPS	MASS MEDIA PROMOTION	-CONAPLAN -LECHE LEAGUE -IGSS
POSTERS			
GUIDELINES	-TEACHING STAFF	WORSHOPS	IGSS

IV. LOW CAPACITATION

NUTRITION	-NUTRITIONIST -PUBLIC HEALTH -TECHNICAL RESOURCES	-PRENATAL AND LACTATING-MOTHERS EDUCATION -NUTRITIONAL COUNSELING	-INCAP
LACTATION MANAGEMENT	-TECHNICIANS -NURSES -OCUPATIONAL THERAPYSTS -SOCIAL WORKERS	-CLINICAL EXPERIENCES -CASE MANAGEMENT REVIEW -HOME VISIT	-LECHE LEAGUE -IGSS
BREASTFEEDING KNOWLEDGE	-PHYSIOLOGISTS -CLINICIANS -IMMUNOLOGISTS -PSYCHOLOGISTS	WORSHOPS	-INCAP -IGSS -CONAPLAN

**SOCIAL SECURITY BREASTFEEDING PROGRAM
STRATEGIES AND ACTIVITIES**

I. LACTATION EDUCATION AND BREASTFEEDING PROMOTION PROGRAMS

HEALTH WORKERS:

HOSPITAL ADMINISTRATORS: economics/ convenience in maternity units

PEDIATRICIANS, OB AND

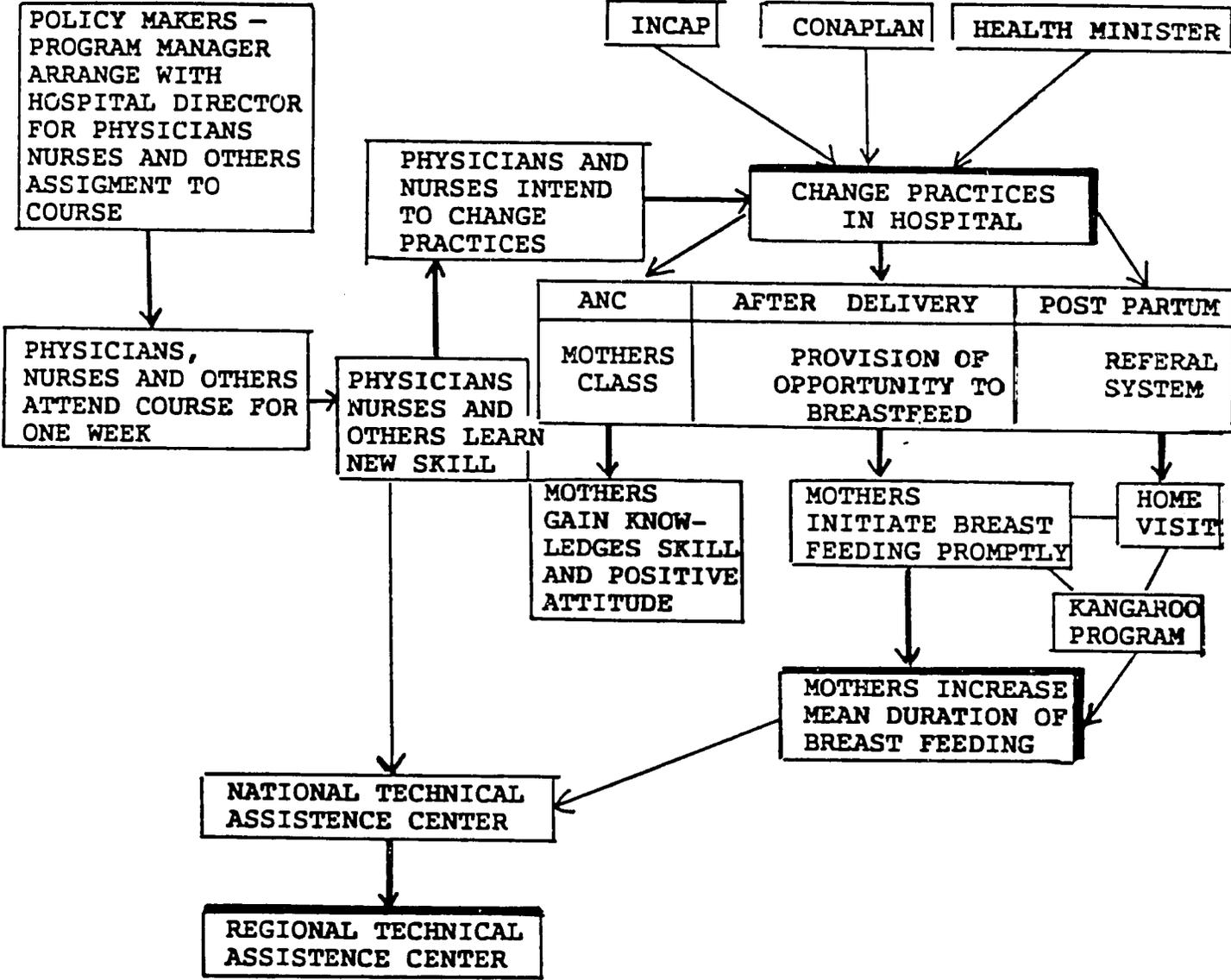
OTHERS:

- lactation education and training
- clinical services
- breastfeeding promotion
- clinical research

II. COMMUNITY BREASTFEEDING PROMOTION PROGRAMS

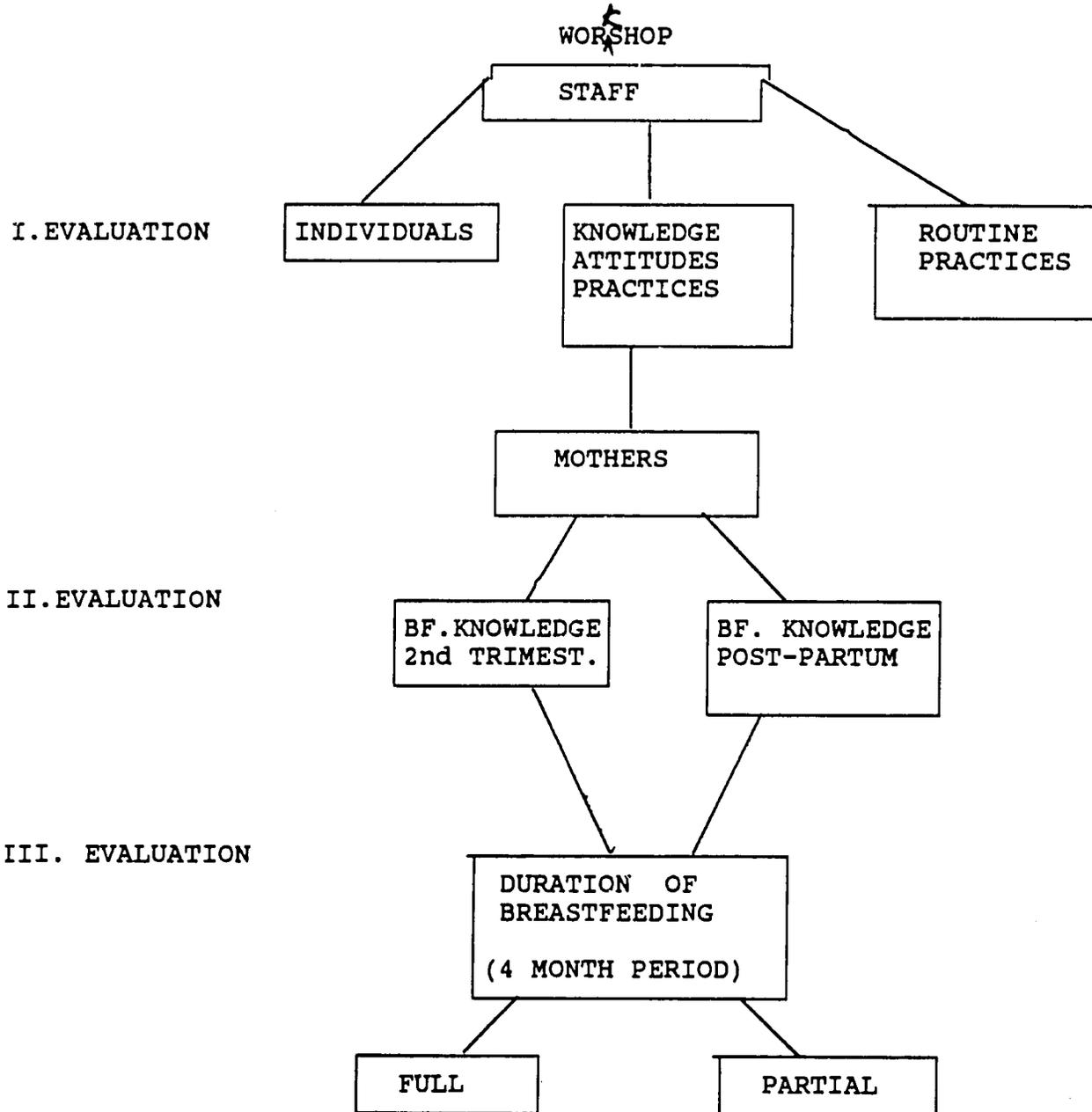
- Education activities related to breastfeeding and weaning
- Breastfeeding promotion via mass media
- Home visiting and other outreach activities
- Enforcement of the Milk Code
- Community research activities

**SOCIAL SECURITY BREASTFEEDING PROGRAM
MODEL PROGRAM**



SOCIAL SECURITY BREASTFEEDING PROGRAM

EVALUATION OF BREASTFEEDING PROMOTION



SOCIAL SECURITY BREASTFEEDING PROGRAM

BUDGET

	EDUCATION	COUNSELING	PROMOTION	ASSISTANCE	HOS. ROUNDS
CONAPLAN	1 h/MONTH	2 h/WEEK	1 h/DAY	0	0
INCAP	1 h/MONTH	2 h/DAY	0	0	0
HEALTH MINISTRY	0	0	1 h/WEEK	0	0
WELLSTART	?	?	?	?	?
I.G.S.S.	1 h/MONTH	1 n/DAY	1 h/DAY	1 h/DAY	1 h/DAY
UNICEF	1 h/DAY	1 h/DAY	0	1 h/DAY	1 h/DAY
LECHE LEAGUE	1 h/MONTH	2 h/WEEK	1 h/DAY	0	0

PROGRAMME OUTLINE

Lactation Education and Breastfeeding Promotion Programme

for

Zambia

TEAM: **Dr. D. D. Kavindele**
 Dr. B.C. Amadi
 Dr. V. Mtonga
 Mrs. M. Mbelenga
 Mrs. M. Chisenga

I. BACKGROUND

Zambia is situated in the southern part of Africa. It is land locked and surrounded by Zaire, Tanzania, Malawi, Mozambique, Zimbabwe, Botswana, Namibia, and Angola (see map). The total land area is 750,000 square kilometers. It is situated on a plateau 1,300 meters above sea level and lies 10-18° south of the equator.

The climate is marked by a pleasant seasonal rhythm. Since Zambia is south of the equator, the seasons are reversed. Summer falling from October to March and winter from May to August. The rainy season occurs between November and March.

Daytime temperature may vary from 26.7°C to 32°C (80°F to 90°F) dropping in the evening to as low as 13.4°C (56°F).

A. Demographic Indicators for Zambia

Zambia's population is estimated to be 7.5 million of mixed races and religions. Urban population constitutes 35%. Population density is 10 inhabitants per square kilometer.

Table 1. Demographic Indicators

Children	
<1 year	4.4%
<5 years	24%
<15 years	49%
Women of child bearing age	22.2%
Crude birth rate (per 1000)	
1985-90	49.7%
Crude death rate (per 1000)	
1985-90	13.2%
Natural growth P.A.	3.68%
Total fertility rate	7%

The infant mortality rate (per thousand live births) is estimated to be 90 while under 5 mortality rate (per 1000 live births) is 130. Maternal mortality rate (per 1000 deliveries) is 20. Children born who survive to age of 5 years is about 87%.

B. Health Services

Health services in Zambia are mainly provided by the government and to a lesser extent, by parastatal companies, private institutions, and missionaries. The government has district, general, and central hospitals supported by rural and urban clinics in different parts of the country. There is only one specialist and referral hospital in the country — the UTH. Traditional healers and traditional birth attendants also provide considerable health care in the community.

Health facilities and major causes of morbidity and mortality are shown in Tables 2, 3, and 4 below.

Table 2. Health Facilities

No. of Health Centres (excluding hospitals)	960
No. of District of Hospitals	65
No. of Other Hospitals	17
No. of Doctors per 10,000 population	1.2
No. of Clinical Officers per 10,000 population	2.6
No. of Nurses per 10,000 population	14.0
No. of Trained Birth Attendants (TBA's) per 10,000 population	1.3
No. of Community Health Workers per 10,000 population	5.3

Table 3. Major Causes of Morbidity and Mortality Among Infants

Perinatal and neonatal problems
Acute respiratory infections (ARI)
Diarrhoeal diseases
Malaria
Skin and eye infections
Protein energy malnutrition (PEM)
Meningitis and Sepsis
Measles
Congenital infections (TORCH)
Congenital malformations

Table 4. Major Causes of Morbidity and Mortality Among Children (1-14 years)

Protein energy malnutrition (PEM)
Malaria
Acute respiratory infections (ARI)
Diarrhoeal diseases
Accidents
Anaemia
Tuberculosis
Meningitis and sepsis
Measles
Other infections including HIV

The UTH has a total capacity of 1700 beds out of which 254 are maternity beds. The annual numbers of deliveries is about 14,000. The Neonatal Intensive Care nursery has a capacity of about 174 cots and incubators.

52

The hospital also provides prenatal and postpartum clinics mostly for high risk patients. The majority of deliveries are done at peripheral clinics. About 20% of mothers are less than 18 years old and about 30% who deliver at UTH return for their postpartum care after six weeks in vaginal deliveries or four weeks in C-section deliveries.

The hospital does not have a well baby clinic. Most babies are referred to peripheral clinics or under five clinics for growth monitoring and immunizations.

About 50% of obstetric patients are "high" risk, 10% C-sections, 24% are born with a weight of less than 2500 gms, and 20% less than 37 weeks of gestation.

Rooming-in is not available, partly due to lack of awareness as regards the importance of exclusive breastfeeding and its advantages; furthermore, of late, there has been a security risk involving baby thefts. However more than 90% of vaginal deliveries initiate breastfeeding 4 to 5 hours after birth, in C-section deliveries breastfeeding is initiated within 24 hours. Dextrose water or formula feeds are given either by bottle or nasogastric tube before the first feed to most term and preterm infants and formula feeds may be given at night to allow the mother to sleep. Critically ill babies or babies with ill mothers are given dextrose water and bottle feeds during most of their stay in hospital.

Talks are given to mothers on general hygiene and good nutrition. Some aspects of breastfeeding such as advantages of breastmilk compared to formula milk, care of the nipple, and hand expression of breastmilk are emphasized.

II. INTRODUCTION

Breastfeeding is an essential part of child survival and development and above all is a basic human right for every child. The benefits of breastfeeding are well documented and evident. Numerous studies have shown that breastfeeding uniquely fulfills a child's psychological, nutritional, and immunological needs. Under all conditions, including those of poverty, infants who are exclusively breastfed through 4 to 6 months thrive better than those who do not. Studies indicate that well over 1 million infant's lives can be saved every year from deaths related to diarrhoea and respiratory infections through increased breastfeeding. This has been shown to also protect the health of both mother and child by contributing to birth spacing through increased duration of lactation amenorrhoea.

Despite this overwhelming evidence, breastfeeding has been steadily declining in many countries. WHO reports that 2/3 of women are still doing some breastfeeding. However almost all infants are given additional foods, drinks, or water well before 4 months — many as early as at birth.

Some of the causes of the decline include medical mismanagement of birth and lactation, commercial and promotion of artificial feeding, urbanization and subsequent changes of family structures, and the changing roles of women.

The average Zambian woman, like any woman in a developing country, is aware that breastfeeding and breast milk is the food for the baby, but the above factors and other traditional beliefs have led to a decline in breastfeeding particularly among urbanized working women. In addition, the lack of practical emphasis on the benefits of breastfeeding in medical and other schools has led to the lack of awareness on the importance of breastfeeding.

III. PROGRAMME PLAN

A. Problem Identification (refer to chart on page 5)

1. No clear cut policy on breastfeeding in the country
2. Inadequate knowledge and emphasis on exclusive breastfeeding among health personnel
3. Logistical constraints:
 - a. Poor organisation of postnatal wards discourages rooming-in
 - b. Poor security discourages rooming-in
 - c. Overcrowding in postnatal wards
 - d. Shortage of nursing staff
4. Formula feeding routinely given to newborn babies
5. Prelacteal feeds given ad libitum
6. Little data is available on infant feeding practices.

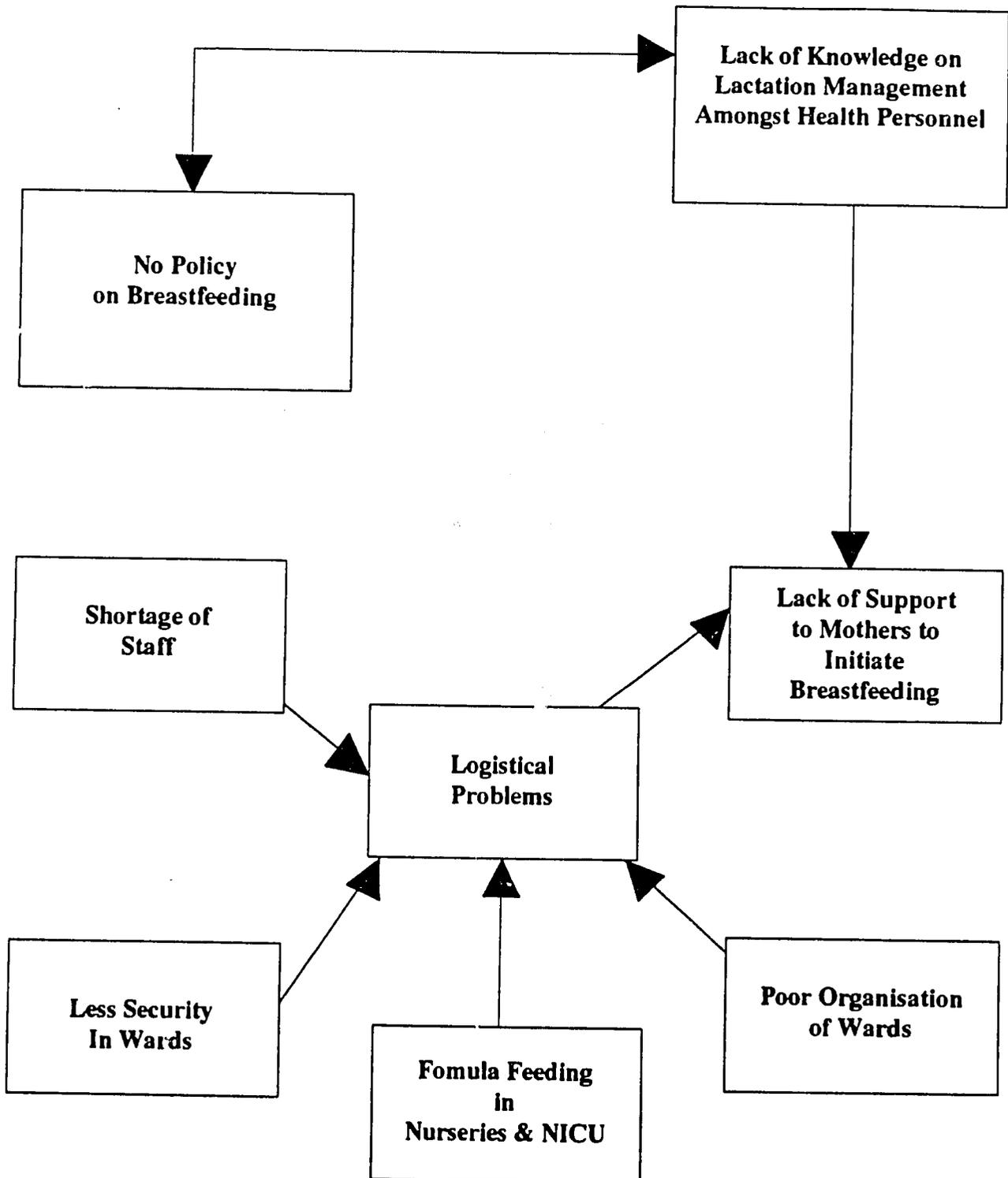
B. Goal of the Programme Plan

To improve maternal and child health through promotion of exclusive breastfeeding.

C. Objectives

1. Percentage of mothers who are exclusively breastfeeding on discharge to increase from ___% to ___% at the end of the first year of the programme.
2. Percentage of mothers who are breastfeeding exclusively from birth to 6 months to increase from ___% to ___% at the end of 2 years.
3. At the end of 1 year, lactation management will be included in the curricula of Schools of Medicine, Nursing & Midwifery, and Health Technology.

PROBLEM IDENTIFICATION



IV. STRATEGIES AND ACTIVITIES

A. Lobbying for Support

i) The first task of the Zambia team is to make the policy makers aware of the benefits of breastfeeding and some new ideas gained from the Wellstart Lactation Program/San Diego.

This will be done through a detailed report to the Director of Medical Sciences through the Executive Director of the University Teaching Hospital Board of Management.

The main aim of lobbying for support on the national level will be to have a clear cut hospital policy on lactation management.

The policy will allow for:

1. Reorganisation of postpartum wards to facilitate reintroduction of rooming-in.
2. Stoppage of giving prelacteal feeds.
3. Initiation of breastfeeding immediately after delivery.
4. Breastfeeding counselling and education of all mothers.
5. Restriction on the use of infant formula.
6. Restriction on the sale of pacifiers, feeding bottles, and infant formula.
7. Mothers with babies in NICU to breastfeed or express breast milk.

ii) The team also intends to approach NGO's who have interest in maternal and child health promotion for assistance in disseminating information about breastfeeding promotion and also solicit for their assistance in any way as regards promoting breastfeeding.

B. Training

Initially the breastfeeding promotion programme will be directed towards training health care workers at the University Teach Hospital. Later this will serve as a model centre before introducing it in other health institutions. The training programme will be provided to doctors, clinical officers, nurses as well as medical students and student nurses.

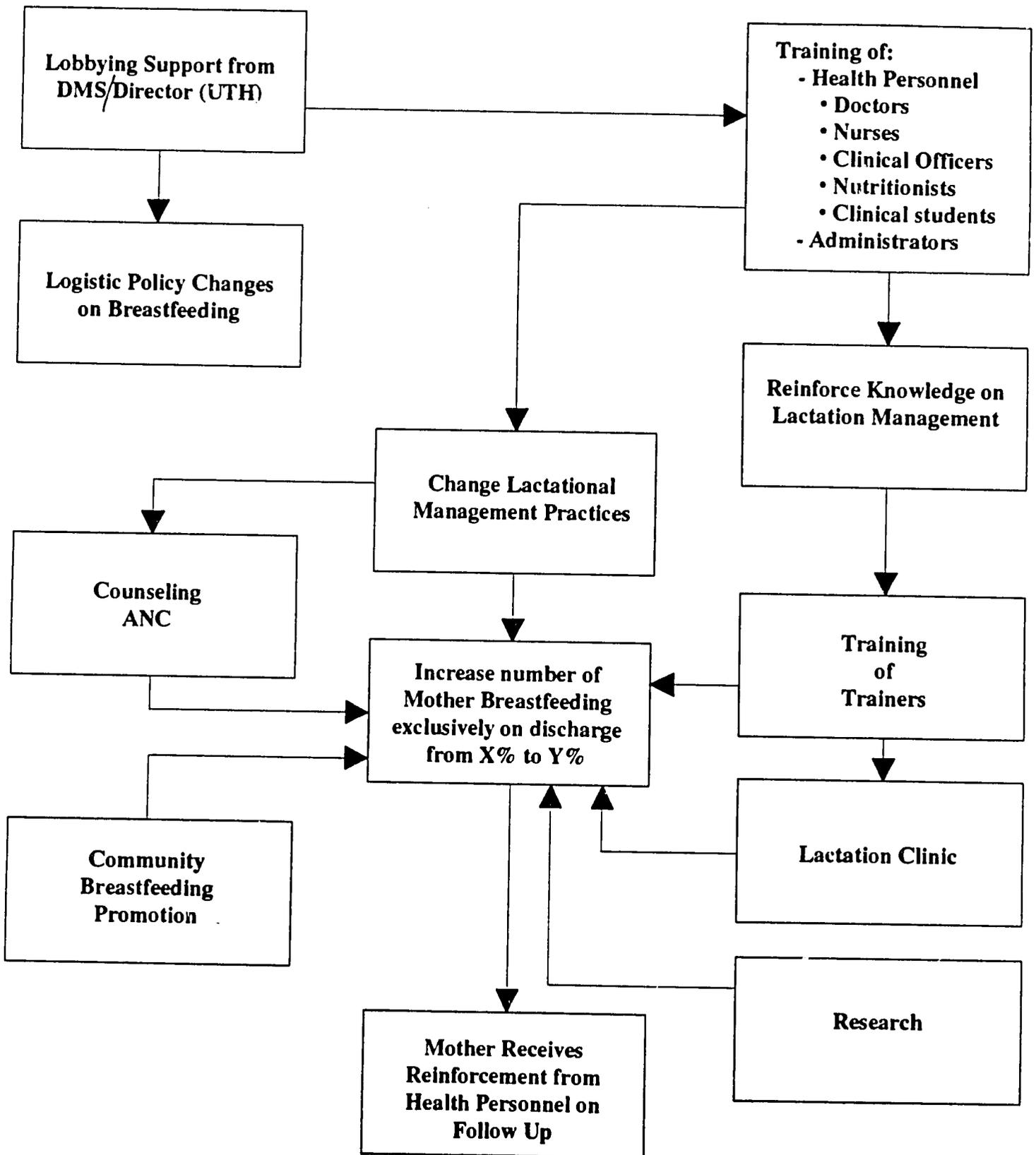
C. Lactation Clinic

The team will set up a lactation clinic where mothers with problems regarding successful breastfeeding will be seen and assisted. The conceptual and operational model is shown on page 7.

D. Community Promotion of Breastfeeding

The team intends to use the media, television, radio, and newspapers and women's groups to disseminate information on lactation.

CONCEPTUAL AND OPERATIONAL MODELS



SS

E. Research

Areas of research to be carried out include:

1. Incidence of exclusive breastfeeding at UTH.
2. Cost saving and effectiveness of lactation management/rooming-in programme.
3. Breastfeeding and diarrhoea
4. Breastfeeding and lactation amenorrhoea
5. Care of the premature babies (Kangaroo style)

V. Organisation

Before initiating any national programme and for its objectives to be achieved, it is important to involve the policy makers. The Wellstart graduates have identified the need to communicate the knowledge gained on the importance and recent advances in breastfeeding and its management to the appropriate higher authorities. These efforts will result in the formulation of a task force which will comprise of the following:

Director of Medical Service — Ministry of Health
Executive Director - UTH
Dean - School of Medicine
Heads of Departments:
 Obstetrics and Gynaecology
 Paediatrics and Child Health
Heads of Nursing Schools:
 Post Basic nursing
 Midwifery
 Health Sciences
Nursing Services Manager

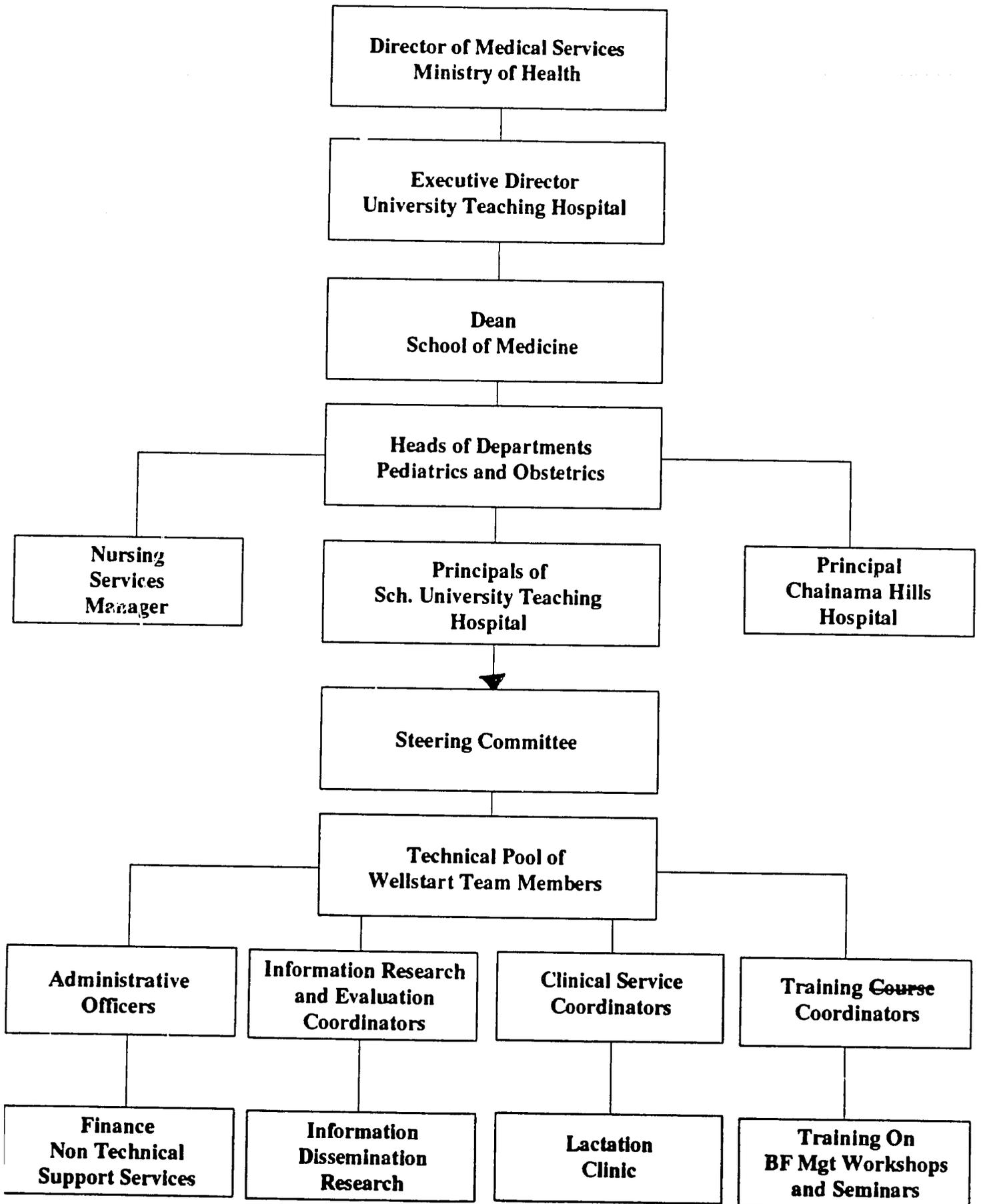
The task force will identify a steering committee that will serve as a technical advisory body to the Ministry of Health through UTH and will coordinate all the activities of the programme (see chart on organisational structure on page 9).

VI. STAFFING (Lactation Clinic)

A. Staffing:

- Wellstart graduates
- Two nurse midwives — Registered Midwife
 — Enrolled Midwife
- One Clinical Officer
- One Nutritionist
- One Typist
- One Clerk
- One Cleaner

ORGANISATIONAL STRUCTURE



B. Roles of staff in lactation clinic

Wellstart graduates (co-ordinators: Dr. D. Kavindele, Sister M. Mbelenga)

- Establishing the lactation clinic
- To adopt the UNICEF/WHO "Ten steps to successful breastfeeding."
- Dissemination of information through media, radio, television, and writing posters.
- Education and training.

Nurse Midwives

- Running of the clinic on daily basis

Clinical Officer

- To give support to Wellstart graduates and the nurses in the clinic

Nutritionist

- To counsel and give advice to mothers with nutritional and breastfeeding problems.

Typist

- Typing of all material gathered as well as research papers.

Others

- The steering committee will meet monthly until the lactation clinic is fully established, thereafter quarterly.
- Other organisations as support group will be hired to support the programme. These are the non-governmental organisations, the Zambian women's league, churches, and donor agencies.
- Other duties of the steering committee will include:
 - Advocacy for change of hospital policy so that it favours the early initiation and establishment of successful breastfeeding.
 - Review the international code on marketing of breastmilk substitutes, feeding bottle, and pacifiers to fit the local Zambian situation.
 - Information, education, communication, and training of health personnel on the importance of breastfeeding and breastmilk issues.

VII. BUDGET

A. Possible sources of funds

1. Ministry of Health, UTH Board of Management
2. PRITECH
3. SIDA
4. Non Governmental Organisations (NGO's)
5. Fund raising ventures

B. Equipment

1. Breast pumps, shields, and models
2. Dolls
3. Overhead projects
4. Camera, films, and videotapes
5. Slide projector
6. Tape recorder
7. Transparencies and markers
8. Screen
9. Stationery
10. Filing cabinets
11. Growth monitoring scales, tapes
12. Video cassette player and television
13. Video teaching tapes
14. Furniture
15. Typewriter
16. Communication cost (postage, telephone)
17. Photocopier and paper
18. General administrative costs
19. Renovation of space
20. IBM computer, monitors, keyboards
21. Printers
22. Computer paper, disks, and software

C. Administrative personnel allowances

1. Director
2. Deputy Director
3. Training Coordinator
4. Administrative Officer
5. Information, Research, and Evaluation Coordinator
6. Statistician
7. Technical advisor or short term consultants
8. Other staff

D. Training and follow up visits

1. Per diems for participants
2. Travel allowance

VIII. EVALUATION

The users of the evaluation will include the Programme Implementation and the Decision makers.

Prior to the implementation of the programme a survey of mothers leaving the hospital after delivery will be conducted to get baseline data on breastfeeding practices.

A survey of 100 mothers will be conducted using a questionnaire which will explore:

- A. What feeding method these mothers are currently using for their newborns.
- B. Whether to their knowledge any formula or other fluids were given to their babies while in hospital.
- C. How long after delivery were the babies given to them for breastfeeding.
- D. What type of counseling and assistance they received from hospital staff regarding breastfeeding, if any, and their plans on the method of feeding on return home.

Another baseline survey will be conducted in the children's outpatient clinic on mothers with babies of 6 months of age using a questionnaire. A sample of 100 mother-infant pairs will be used to:

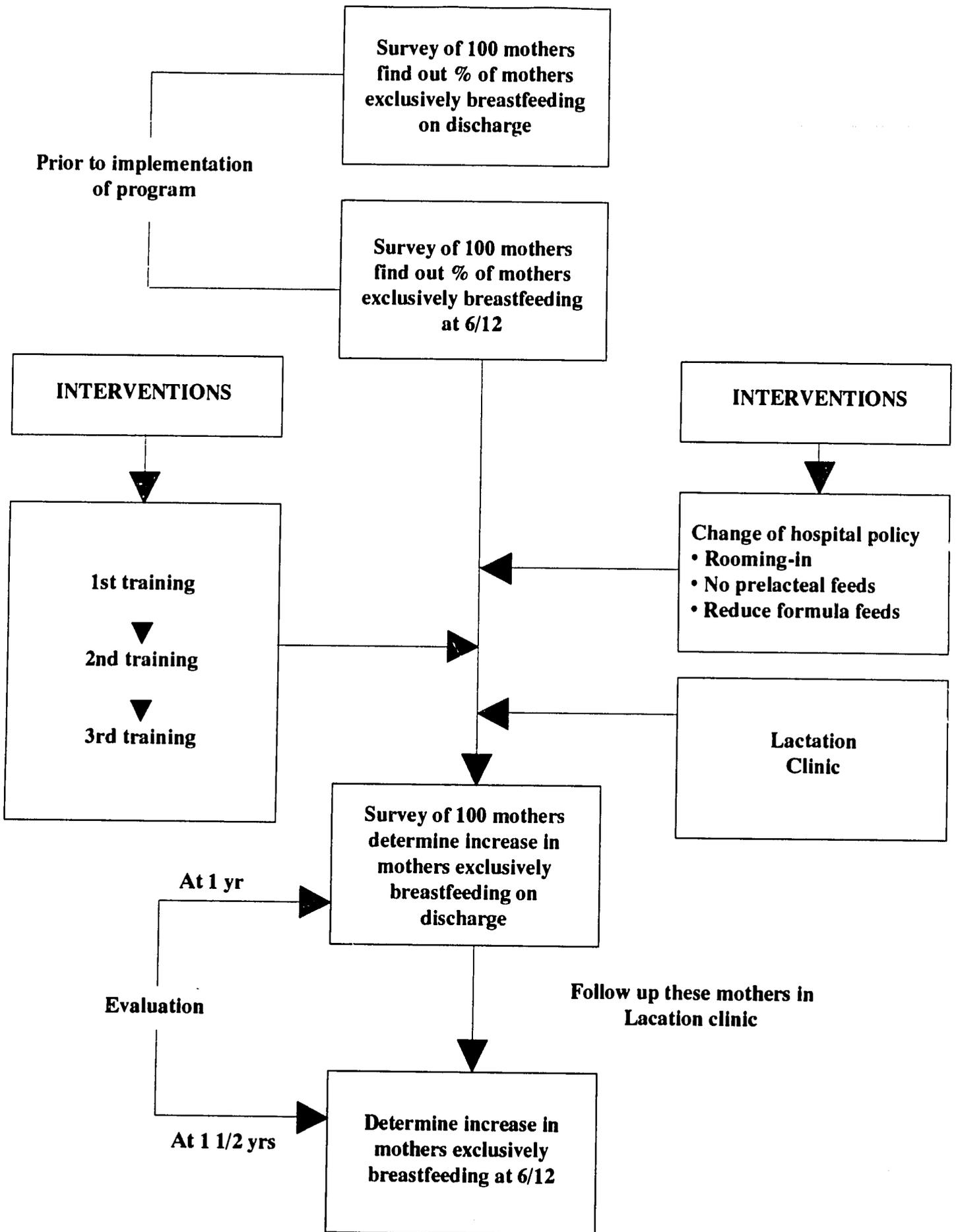
- A. Determine what percentage was exclusively breastfeeding at this age (6 months).
- B. Determine the reasons why breastfeeding was stopped or why breastfeeding was being supplemented.
- C. What type of supplement feeds are being given.

Training seminars on lactation management will be conducted every 3 months to train doctors, nurses, and midwives working in antenatal clinic, labour ward, postpartum wards, paediatric wards, neonatal intensive care unit, and the paediatric outpatient clinic.

At the end of the first year, a 3rd group of 100 mothers infant pairs will be recruited in a study. These will be followed up in the lactation clinic on monthly basis until the infants are 1 year old. The objective of this study will be:

- A. To determine the increase in percentage of mothers exclusively breastfeeding at the time of discharge compared to the number in the baseline survey.
- B. To determine the increase in percentage of mothers exclusively breastfeeding at 6 months compared to the number in the baseline survey.

(see the flow chart on page 13.)



64

PROGRAMME OUTLINE

Lactation Education and Breastfeeding Promotion Programme

for

**LADY READING HOSPITAL
Pakistan**

**TEAM: Obstetrician — Professor Shamim Majid
Paediatrician — Mohd Imran
Paediatric Nurse — Gulzar Begum**

I. BACKGROUND

A. The Country (see the map attached)

Islamic Republic of Pakistan is mainly a Muslim country. It achieved its independence from all India and British Rule on 14th August 1947.

The population consists of 95% Muslims, 5% minorities group, Christian, Hindu Sikh, etc. Pakistan has a population of 11.5 million with a per capita income of 350 U.S. dollars, inhabiting an area of 800,000 square miles (the size of Spain and Italy). Population density is 134/per square miles. Population growth averages about 3.1 percent per year.

Average growth rate of urban population is 5%. Total adult literacy rate is 31% and in females it is 13%. 52.5 percent of the population is under the age of 16 years. Total fertility rate is 64%. Only 24% of babies are attended by trained health personnel. Maternal mortality rate is 500/100,000. Infant mortality rate is 107.7. Contraceptive prevalence rate is only 8%.

Initiation of breastfeeding is about 99%. 87% maintain it to 3/12 and 74% for six months and only 51% mothers are nursing their babies at 12 months.

Efforts are being made to improve health and medical services, only 1% of GNP is spent on health. However, rapid population growth, aging of population and urbanization are generating constant burden on the existing facilities.

Table I

Medical Facilities from 1988 to 1990			
Medical Facilities	1988	1989	1990
Beds in Hospitals & Dispensaries	64471	65398	71897
Registered Doctors	42862	47289	51883
Registered Dentists	1772	1918	2077
Registered Nurses	14015	15861	16948
Hospital beds per nurse	4.6	4.1	4.2
Population per Hospital	1610	1636	1535
Population per Doctor	2422	2263	2127
Population per Dentist	58589	55808	53134

B. The Province

North West Frontier Province.

Pakistan has four provinces, Sindh, Punjab, Baluchistan and N.W.F.P. Our province is the smallest in the area and has 2.5 million total population. Over 3.7 million Afghanistan refugees arrived in Pakistan during the period of 1979-1990. The refugee population was mainly concentrated in N.W.F.P. (Table II). Urbanization is on rampage with slow development of cities which cannot keep pace with the growing demands. Refugee factor is important as it has taxed our already meager resources and consumed majority of the hospital beds. N.W.F.P. has three medical institutions.

1. Under-graduate AYUB Medical College at Abbottabad.
2. Under-graduate Khyber Medical College at Peshawar.
3. Post-graduate Medical Institute of Lady Reading Hospital, Peshawar.

Table II

Province Wise Breakdown of Afghan Refugees

Name of the Province	Registered Population	Un-Registered Population	Total
N.W.F.P.	2,209,487	300,000	2,509,478
Baluchistan	841,027	100,000	941,027
Punjab	173,407	101	173,508
Sindh	20,067	62,528	82,595
Azad Kashmir		3,065	3,065
Capital Territory		2,243	2,243
Total	3,243,988	267,937	3,711,925

C. The City

Peshawar is the capital of N.W.F.P. It has a population of over 300,000 people. It is forever expanding with newer townships being added every few years. As it is situated on the borders of Afghanistan it had to pay the brunt of all refugees so you can see it is surrounded on almost all sides by refugee camps, mudhouse colonies, tented villages and houses. In these dwellings the drinking water is unsafe with poor sanitation. Poverty and illiteracy adds to the miseries. Preventable infectious disease are quite common here. Our transport system is still in its infancy, most of the farflung areas are cut off from the main city due to its lack of communication, which became worse in adverse weather. The phone systems is not developed. Correct data collection and reliable statistics are not available all over the country.

D. The Institution.

Postgraduate medical institution was carved out of Khyber Medical College in August 1984. It is housed in the oldest and the largest hospital of the metropolis, i.e. Lady Reading Hospital. This is situated right in the heart of the city with easy access to bus stops, railways and shopping areas, as opposed to Hayat Shaheed Hospital which is situated on the university campus surrounded by a posh, residential area.

The dean of the institute is the senior most professor and the administrator is the second senior most professor. Thus both amenable to our positive suggestions.

The hospital has 1250 beds, out of this 128 beds are OB-Gyn and 80 are Paediatrics.

TOTAL DELIVERIES 1-1-90 to 31-12-91	
Total Deliveries	5759
Booked Cases	10%
Teenage Pregnancy	5.65%
C-Section	15%
Low Birth Weight Babies	18.7%
Still Births (Hospital)	16%
Maternal Mortality	16/1000
Perinatal Mortality (Hospital)	17.7%
Infant Mortality	110/1000
Severe to Moderate Malnutrition 0-4 yr.	48%

E. The Team

1. Prof Shamim S. Majid (Ob-Gyn)
Post Graduate Medical Institute
MBBS (Punjab)
Fullbright Scholar for USA.
DRCOG (Lond)
MRCOG (Lond)
FRCOG (Lond)
Diploma Family Planning (Lond)
2. Prof Mohd Imran (Paediatrics)
Post Graduate Medical Institute, Peshawar
MBBS (Punjab)
FAAP
DCH (Lond)
DCH (Lond)
Diplomat American Board of Paediatrics
3. Gulzar Begum (Paediatric Nurse)
Post graduate Medical Institute, Peshawar
Registered Nurse (RN)

II. THE PROBLEM

Pakistan, because of its main religion and cultural background, is basically a breastfeeding country, with a 97-99% initiation rate and continuing it for more than 12 months in about 51% care BUT this breastfeeding is:

- a. Neither early
- b. Nor exclusive
- c. Nor correct

Prelacteal feed in the form of Ghutti is prevalent and most of the time the colostrum is discarded.

Health is a provincial subject. A breastfeeding committee was formed on 17-1-91 with Prof Imran as its chairman and myself, Prof Lala Dukh, Prof Roghani and others as its members. The task of this committee is as follows:

1. To collect data.
2. To promote breastfeeding.
3. To educate the public via media on breastfeeding issues.

4. To advise government in formulating breastfeeding policy to the hospital and community.

III. GOALS

Early initiation and correct method of breastfeeding immediately after vaginal deliveries, and within 2 hours after caesarean delivery in 100% of cases.

IV. OBJECTIVES

- A. Within one month 100% of the mothers with normal vaginal deliveries will initiate breastfeeding immediately and caesarean section cases after 2 hours.
- B. Health professionals will be able to demonstrate correct breastfeeding techniques to 90% of mothers.

PHASE I

We have already started collecting baseline data and KAP studies in our hospital patients.

When we go back we will conduct a pretest on some basis as Wellstart pretest.

We want to initiate breastfeeding right at the delivery table preferable before the third stage of labour as it will have the additional advantage of reducing the postpartum haemorrhage and early bonding, and in post caesarean cases preferably within 24 hours provided the baby is not sick/ill.

This will continue for at least one year after the programme has started.

The following groups of people will be targeted:

- A. All the faculty members and Matron.
- B. All the doctors working in the Ob-Gyn and Paediatric ward.
- C. Nurses in Ob-Gyn and Paediatric.
- D. Lady Health visitors.
- E. Midwives
- F. Hospital Administrator.
- G. Public through media and health education.

For A to F we have an educational programme which will be further modified and fortified.

We want to start the program at Lady Reading Hospital Peshawar of Post-Graduate Medical Institute.

The emphasis will be to put 100% of mothers on breastfeeding (immediate to 2 hours), and the correct method of breastfeeding. This will be followed in our Well Baby clinic, postnatal, and outpatient's department as well.

Please see the month wide breakdown of the programme.

The time to initiate the breastfeeding and duration of frequency will be documented in our daily progress notes. This will enable us to do a clinical research or retrieve information when needed. Preferably it be coded for computer.

MONTHLY CALENDAR

PHASE I

OCT-NOV Rethinking reading material from Wellstart	DEC 91 Educational programme to be chalked out	JAN 92 Meeting and briefing faculty, administrator, Matron & Media	FEB 92 Lectures ward-rounds for Doctors, LHV, Nurses	MAR 92 Early and correct lactation Initiated in lab room ANC-PNC- PNATAL ward Well Baby clinic
APR 92 Problem cases and its solutions with doctors Discussions	MAY 92 Breast Clinic in its primitive form to be established at LRH Peshawar	JUN-AUG 92 Further improvement and short term evaluation	SEP 92 A trip to San Diego for refresher course!! (If possible) otherwise summer vacation.	

PHASE II

OCT 92 One day seminars for GP - District Specialist on monthly basis	NOV 92 Clinical research on one of the common lactation problems.	DEC 92 Outreach Community Project in a nearby village.	Publish a paper about our experience.
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V. STRATEGIES

- A. Pretest for all the participants, same as Wellstart with local modifications.
- B. An educational programme already exists and the breastfeeding part of it will be chalked out and streamlined.
- C. A baseline data for normal vaginal deliveries and caesarean section will be collected in about 1,000 cases.
- D. A breastfeeding policy for hospitals already exists (see Annexure III), it will be discussed with Administration, Matron and media men, a jingle spot for TV will be thought of.
- E. Daily ward round checks for on the job evaluation will be emphasized.
- F. At present 5% of didactic lectures are on anatomy, physiology and pathology of lactation this will be doubled to 10% (from 6 hours/year to 12 hours/year).
- G. Demonstration of examination of normal breasts, lactating breasts, and pathological breasts will be carried out at bedside, in the OPD, at Postnatal clinic, and in future breast clinics. To start with we will use Wellstart slides, videotapes and then try to develop our own learning and teaching material.
- H. The programme will be critically analyzed by holding once a month staff meeting and modified according to the discussion.
- I. All attending doctors will strictly enforce early and correction breastfeeding and document it on the chart.

- J. We cannot make headway unless we educate our public as well during their period. Most of the women are motivated culturally or religiously so the emphasis will be on the use of colostrum, early initiation, correct method of breastfeeding and maintaining it exclusive for at least 6 months.
- K. We will meet and enlighten various women support groups and the ministry of women division (we have one in our country and province). This will help us in disseminating the knowledge further and by providing "Creche" at factory or place where working women are nursing.
- L. A jingle for TV viewers will be made.

PHASE II

The same plan will now be shifted to district hospitals, other giving district specialists and health professionals short 1 day on the job training, 1 day seminars, etc. will be conducted.

PHASE III

Breast clinics with its separate staff will be established in all the teaching and district hospital

ORGANIZATION & STAFFING

Presently we have the following set-up in our hospital:

PAEDIATRICS	Professors	2
DOCTORS	Associate Professors	2
	Assistant Professor	2
	Senior Registrars	2
	Junior Registrars	2
	Medical Officers	20
	DCH Students	8
	FCPS II Students	5
NURSES	Head Nurse	1
	Staff Nurses	14
	Student Nurses	14
	Six outpatient sessions/week	
	Six teaching ward rounds/week	
	Three didactic lectures of 90 minutes each/week	
	Journal club once/week	
	Five clinical research going on/year	
OBSTETRIC	Professors	2
	Associate Professor	2
	Assistant Professor	2
	Senior Registrar	2
DOCTORS	Junior Registrar	2
	Medical Officer	10
	DGO Students	6
	FCPS II Students	8
NURSES	Head Nurse	2
	Staff Nurses	12
	Student Nurses	12
	LHV	12
	Six outpatient sessions/week	
	Six operation days/week	
	Alternate days 24 hr admission/emergencies	
	Four didactic 90 min. lectures/week	
	Journal club once a week	
	14 clinic research projects going on at the moment (i.e. one/per postgraduate student)	
	There is one clinicopathological conference for the whole hospital every Thursday morning, attendance is compulsory for the whole staff.	

At present in obstetrics we allocate 6 hour (lectures) per year on the anatomy physiology of lactation and its clinical applications. All the obstetric staff knows how to examine a normal breast and clinically diagnose a nodule, cyst, lumps, mastitic and breast abscess. They can effectively deal with lumps, nodules, mastitis, abscess and abnormal discharge from the nipple. Once in a while we treat breast carcinoma breast, i.e. when the patient is too shy to go to a male surgeon.

In Paediatrics, the lectures are given on breastfeeding, diarrhoea and malnutrition, etc. to the post-graduate students, medical officers and nurses. There are 5 days/month workshops which includes breastfeeding to general practitioners and district doctors. On Paediatric ward rounds the emphasis is on breastfeeding, breast fed vs. underfed bottlefed babies, hospitalization for the workup of "lactation failure" cases.

As professors, we make our own teaching programmes and curricula, we will double our teaching time from 6 hrs to 12 hrs/year for breastfeeding and its relevant subjects. On the ward rounds more emphasis will be placed on early lactation, use of colostrum, correct method of breastfeeding, and detecting disorders in the earliest stages. Rooming-in is the practice, but it will be strictly adhered to, and the babies in intensive care nursery will be provided with colostrum and expressed breast milk from the mother to discourage necrotizing enterocolitis cause by the formula milk. At the present all these babies are fed by formula mostly.

In this phase we will allocate a two doctors and two nurses one from each obstetric and paediatric ward on weekly rotation basis to work in the breast clinic under the supervision of a consultant.

PHASE II

When the funds will be available we would like to have a separate room and space specially for lactation clinic. We have a new building coming up for child and mother care in our institute in the next five years so a full fledged breast clinic on Wellstart pattern can be added to it.

BUDGET!!

As no funds will be available we are advised not to make this. When funds are available we will utilize them judiciously!!

VI. EVALUATION

Pretest evaluation of all the participants in the training will be carried out by multiple choice questions on the pattern of Wellstart questionnaire. In February 1992 before the start of the course. It will be separate for nurses and doctors.

Evaluation at the end of the period will be of:

- A. Mother in postnatal clinics
lactation clinics
well baby clinics
- B. Charts, by chart review as we have inserted the following:
Time of initiation and lactation
Duration of breastfeeding
Frequency of breastfeeding
Exclusive breastfeeding/not

C. Health professionals

1. Post test
2. Daily ward rounds, and progress notes, a constant day to day, on the job evaluation, of the doctors and the nurses for the correct breastfeeding and problem solving. We don't need standardized patients for this.

VII. National level examinations for diplomæ and higher degrees are held annually and twice a year (October-April) by the Pakistan College of Physicians and Surgeons and for DGO (Peshawar) the examination is conducted by the University of Peshawar. We make the paper and conduct the practical examination as well, for these students. This is a combination of multiple choice questions, essay type questions and a practical examination. We will include at least 5% questions on breastfeeding and allied problems and include on problem case in the practical examination on the pattern of your "standardized patient."

For nurses, similar questions and cases will be added to their paper and practical examination.

BREAST MILK IS THE IDEAL FOOD FOR BABIES. THE HEALTH FACILITY SHOULD DO THE FOLLOWING TO PROTECT, PROMOTE AND SUPPORT BREASTFEEDING.

1. Hospital administrative, obstetric, paediatric, nursing and paramedical staff shall form a team that ensures the implementation of this breastfeeding policy.
2. Relevant health care staff shall be trained in the skills necessary to implement this policy.
3. All expectant mothers, shall receive education on the benefits and management of breastfeeding, the dangers of bottle feeding, and the dietary needs during pregnancy and lactation. Prenatal exams shall include breast examination.
4. In the delivery room, newborn infants, including premature infants, shall be put on the breast within one hour of delivery. Babies should be fed on demand, every 2-3 hours for a minimum of eight feeding within 24 hours.
5. Exclusive breastfeeding shall be promoted from birth to 4-6 months. No water, ghutti, fresh animal milk, infant formula or other liquid is to be given to an exclusively breastfed infant. Trained health care staff shall help mothers having breastfeeding problems to continue to breastfeed.
6. Staff shall promote the introduction of semi-solid foods at 4-6 months with continued breastfeeding up to 2 years.
7. No feeding bottles and pacifiers shall be allowed in the health facility.
8. No promotional materials about formula, feeding bottles and pacifiers, such as posters, free samples or gift items, shall be allowed in the facility nor shall they be given to the mother.
9. No health care staff shall receive gifts, free samples, donations, free training, etc., from formula manufacturers.
10. Mothers shall be given sufficient education so that they can explain that:
 - breastfeeding should be started within one hour of delivery after birth because:
 - Colostrum is important for babies and protects them from infection.
 - frequent breastfeeding increases breastmilk production.
 - babies should be fed only mother's milk for the first four to six months because:
 - it is the best food for babies.
 - it prevents infections.
 - bottlefeeding can cause serious illness and death.
 - supplementary foods should be started between four and six months.
 - lactating mothers should eat more food and drink more liquids to maximize their milk supply.

PROGRAMME OUTLINE

Lactation Education and Breastfeeding Promotion Programme

for

**HAYAT-SHAHEED TEACHING HOSPITAL
Peshawar, Pakistan**

TEAM: **Obstetrician – Lala Rukh Malik**
 Paediatrician – Mehr Taj Roghani
 Paediatric Nurse – Perveen Begum

I. BACKGROUND

Hayat Shaheed Teaching Hospital is one of the two major hospitals of Peshawar. Peshawar is the Capital of the North West Frontier Province of Pakistan. Pakistan is a country which is full of resources, but is still a developing country due to mismanagement.

The Islamic Republic of Pakistan came into being on August 14, 1947, as a result of division of the Indian subcontinent. The estimated population of Pakistan (1989) was 118.8 million. Annual number of births in 1989 was 5,452,000. Annual number of deaths under 5 was 883,000 during the same year. U5MR was 162 and Infant Mortality Rate was 106. GNP per capita is US \$350. Life expectancy at birth is estimated to be 57 years. In 1985-86, 44% of the population had access to safe water and 55% to health services.

The annual growth rate in 1980-89 was 3.7, with a crude death rate of 12. Maternal mortality rate during 1980-88 was 500. The adult literacy rate is estimated to be 31%.

About 96% of Pakistanis are Muslims.

In 1981, when the population of NWFP (our province) was 11,061,328, the population of Peshawar was 2,281,752 in an area of 4,001 per square km. The population of this city has greatly increased since then due to the influx of refugees from Afghanistan after Russian invasion of more than a decade ago.

HST Hospital, like LR Hospital, caters for Peshawar District. It is a referral hospital for the province as well as tribal areas around.

HST Hospital was commissioned in October 1976. It is centrally air conditioned and has many facilities available. The total number of beds is more than 1,200, with 58 maternity beds, 6 labour beds, and 4 delivery beds. Number of deliveries is over 2,400 per year, of these 30% are premature. The healthy babies are roomed-in and sick babies are sent to the nursery. If a mother wants to breastfeed the baby, she can stay in the maternity ward for as long as necessary. About 12 rooms are occupied by private patients. Most of the deliveries take place at home. A considerable number of patients coming to the labour room have some abnormality of pregnancy or labour. Caesarean section rate in the hospital is 13%, much less than in the whole population. Average stay in hospital for normal delivery is about 2 days. Patients with Caesarean section stay for at least 1 week. Almost all mothers wish to breastfeed and do so. Mother is seen again in the postnatal clinic after 4-6 weeks. The babies are examined once by a medical officer after birth, and then daily by the house officer.

II. PROBLEMS

- A. As the majority of mothers breastfeed their babies, it seems that all is well. This is well known that thousands of our infants die of diarrhoea and other diseases of infancy, as a result of which our U5MR is very high. Recent studies have shown that a policy of early initiation of lactation and exclusive breastfeeding for about 6 months can greatly reduce this mortality. It has made us determined to do some research in this area in our own area, pinpoint the actual problems, and to manage them. No statistics are available about the practice of breastfeeding in our province. Our impression is that about 99.9% of mothers breastfeed their babies, and mostly for 2-3 years. The main causes of non-initiation and discontinuation of lactation are as follows:

1. Death of infant.
 2. Gross abnormality of nipple or baby's sucking apparatus.
 3. Actual or supposed lack of milk in the breast.
 4. Another pregnancy.
 5. After 2-3 years of lactation, due to the thought that religious obligation has been fulfilled and it is time for the baby to take adult food.
 6. Repeated death of infants, thinking that breastmilk is at fault.
 7. Adverse affect of breastfeeding on an undernourished mother.
- B. "Ghuttee" as the prelacteal feed is always given. It is honey in most cases. We need to do research in our own community to prove it beneficial or otherwise.
- C. Water is given to most infants in very hot weather. We need to do research in this area, too.
- D. Poverty, non-availability of a balanced diet, and lack of health education are also our current problems.

III. GOAL AND OBJECTIVES

- A. Goal: To promote the practice of early initiation of lactation, exclusive breastfeeding for six months, and partial breastfeeding for two years in the mother-infant units seen in the Hayat-Shaheed Teaching Hospital, Peshawar.
- B. Objectives: At the end of one year of this programme of HST Hospital:
1. The Administrator of the hospital will have given his written approval and a helping hand in this programme.
 2. About 60% of the medical and paramedical staff will be able to answer correctly 50% of the questions asked in the post test.
 3. About 50% of mothers will be breastfeeding their infants exclusively, 50% will have initiated lactation early, and 60% will be continuing to partially breastfeed their babies for one year or less.

IV. STRATEGIES, ACTIVITIES, AND EVALUATION

- A. The Administrator Within two months after reaching home, the team will arrange a meeting with the Administrator. He will be informed about the problems of lactation in the province, the solution of problems through the LM programme, and suggestions about its implementation. He will be requested for assistance in the programme. His permission for the programme will be taken in black and white.

B. Lactation Education and Training

1. The medium of instruction will be "Urdu" (the national language). The subjects taught will be the following:
 - a. Current practice of lactation management and associated problems.
 - b. Anatomy and physiology of breast and examination of breast.
 - c. Proper method of breastfeeding, early initiation, exclusive breastfeeding, and partial breastfeeding for two years.
 - d. Problems during breastfeeding and their management.
 - e. Abnormalities and diseases of the breast and their management.
 - f. Role of the participants in the training.

The amount of material taught will be according to their understanding, education, and role in the programme.

2. Persons to be trained:

- a. Physicians of the Ob-Gy and Paeds Units (Associate and Assistant Professors, Senior and Junior Registrars, Medical Officers, and House Officers). The trainers will be members of the team (trained by Wellstart). The trainees will be divided into two groups. Each group will be given:
 - (1) one lecture (one hour) with flip charts and transparencies;
 - (2) one session of slides (one hour);
 - (3) one session on examination of breasts (models and on actual patient); and
 - (4) one session on demonstration of proper methods of breastfeeding.

The flip charts and transparencies will be prepared locally. The models and slides will have to be bought.

- b. Nurses, both of Gynae-Obs and Paeds departments will be taught by the nurses trained by Wellstart.
 - (1) A lecture on breastfeeding will be added to the curriculum of training of nurse-midwives.
 - (2) The nurses will be divided into groups of eight persons and be trained by the same methods as for doctors. Four such groups will be trained within the first four months of the programme. The time and dates for the training programmes will be fixed after consultation with the nursing tutors.

c. Medical students

- (1) The medical students have always been taught about the importance of breast examinations. They do have a lecture on the breast in the final year of their studies. Importance of breastfeeding will be added in that lecture.
- (2) The medical students spend 10 days in each unit of Gynae & Obs and Paeds during 3rd, 4th, and 5th year of their medical studies. They will be able to participate in the programme in the labour room, nursery, and the wards.

d. Dai's, birth attendants who are untrained, help the nurses in looking after the mothers and the babies. The nurse from the team will give them a one hour lecture plus demonstration about the programme. The number of Dai's will be 12 per class. There will be one such training programme every six months, the first within six months of the start of the programme.

Venue: The training for above mentioned persons will be conducted in the lecture rooms of the unit's medical college and on bedside.

Evaluation: The trainees will be given a pre and post training test in writing or oral (in case of Dai's). The evaluation will also be done by day to day observation of persons at their work, by the team members. An overall assessment will be made after six months of the training by mutual discussion.

e. Programme Medical Officer: One medical officer from the paediatric department will be designated as Programme Medical Officer. He will attend almost all the training programmes for different categories of trainees. He will be the Number Two in charge of the programme after the team members. He will start working during the second month of the Programme. His work will be evaluated by a pre test and a post test after four months.

C. Clinical Services and Breastfeeding Promotion

1. Antenatal Clinic

Once a week (Mondays from 10:00 a.m. to noon) the Programme Obstetrician and Programme Medical Officer will work in the antenatal clinic. Ten patients will be selected at random. The obstetrical history, previous history of breast or bottle feeding, and parity plus child mortality will be recorded. These women will be taught about the suggested practice of breastfeeding of the Programme. They will be booked for hospital delivery. A specially made chart will be attached to their record. They will be given tetanus toxoid and a handout about nutrition during pregnancy and lactation.

Posters will be hung on the walls for educating women about:

- a. nutrition;
- b. disadvantages of bottle feeding and pacifiers;
- c. advantages of early initiation of lactation, exclusive breastfeeding and partial breastfeeding for two years;
- d. information about the lactation management clinic of the hospital; and
- e. advantages of attending antenatal and postnatal clinics.

A register will be kept by the Programme Medical Officer for making entries about these patients.

An attempt will be made to enter ten new cases each week.

2. Labour Room and Delivery Room

The medical and paramedical staff will be expected to attach the special form to the records of at least two patients every day (week days). All patients will be encouraged to initiate breastfeeding within one hour (in cases of difficult or operative delivery, within two hours). The patient will not leave the labour room before they have put the baby to the breast. The "Ghuttee" will be discouraged unless it is colostrum itself. All such patients will be taught and given handouts about the Lactation Programme. Bottles and pacifiers will not be allowed in the labour room unless indicated. The baby will be roomed-in with the mother. Doctors, Nurses, and Dai on duty will conduct and supervise this practice.

3. Obstetrical Ward

Well babies are already being roomed-in in the wards. Babies will be examined by the medical staff on duty. It will be checked by the same staff whether the special charts have been attached to the records, lactation initiated, and is exclusive.

A record of the drugs given to the patient will be kept and drugs which can affect the baby adversely will be avoided if possible.

While being discharged from the hospital, the mother will be given a handout about breastfeeding and nutrition and will be given an appointment after four weeks (on Monday) to be seen in the postnatal and lactation management clinic. She will be told that she can come early if needed.

4. Postnatal Clinic

The postnatal patients and their infants will be seen by the Obstetrician and the Programme Medical Officer in the postnatal clinic on every Saturday from 10:00 a.m. to 12:00 noon (at least four patients and four babies). The information obtained will be entered in a register. The mothers will be

interviewed about their practice of baby feeding and about their adherence to our lactation management programme.

5. Paediatric Ward

An attempt will be made to educate and encourage all mothers of children below the age of two years to participate in our LM Programme. Mothers will be encouraged to breastfeed, give breastmilk by dropper or cup as the case may be, keep the breasts stimulated by removal of breastmilk by hand or pump. Use of bottles or pacifiers will be discouraged. The special form will be attached to the records and history of feeding methods and morbidity and mortality recorded in the mother's records as in antenatal records.

Relactation will also be encouraged. This will be done by the medical and nursing staff on duty. Programme MO will assist the ward staff. Posters will be hung on the walls as in the antenatal clinic and obstetrical ward.

6. Nursery (Sick Baby)

Almost all babies who survive will be registered in the Programme. The Programme MO will take a daily round of such babies for ½ - 1 hour. Mothers will be encouraged to breastfeed the babies or to give their milk by expression and to keep the breasts stimulated by frequent expression of milk. The mothers whose babies will be able to breastfeed will be given a place to stay near the nursery.

7. Lactation Management Clinic

This clinic will be established in the paediatric department within three months of the beginning of the Programme. It will be once a week and will be run by the Programme MO from 10:00 a.m. to 12:00 noon. Mothers and babies with lactation problems will be referred to this clinic. About four patients will be seen in each clinic. The paediatrician and the obstetrician will be available to help the Programme MO. A good record will be kept of all patients. Those cases who will need another expert opinion will be referred to him.

The obstetrician and the paediatrician will refer cases to this clinic from their outpatient departments and private clinics. An attempt will be made to accommodate patients from other institutions as well.

The mothers from HST Hospital will carry the message to other mothers from their communities, thus promoting breastfeeding in far flung areas.

8. Public Media

An attempt will be made by the team to send the message to the public through talk on radio and television and through news and articles in the local and national newspapers.

V. RESEARCH

As a proper record of all activities will be kept and mother's and infant's past histories will be documented, the research work will continue side by side with the progress of the Programme. The team shall be able to prepare a report within two months time of the end of one year.

VI. ORGANIZATION AND STAFFING

Team: Obstetrician: Lala Rukh Malik
 Paediatrician: Mehr Taj Roghani
 Paediatric Nurse: Perveen Begum

Gynae & Obs Department: Two units

Professors: 2
Associate Professors: 2
Assistant Professors: 2
Senior Registrars: 2
Registrars: 2
Medical Officers: 6
House Officers: 16

Paediatric Department: Two units

Professors: 2
Associate Professors: 2
Assistant Professors: 2
Senior Registrars: 2
Registrars: 2
Medical Officers: 6
House Officers: 16

Nursery Staff:

Head Nurse: 1
Staff Nurses: 4
Student Nurses: 7

Paediatric Ward:

Head Nurses: A & B units
Staff Nurses: 4
Student Nurses: 7

Gynae & Obs Wards:

Head Nurses: A & B units
Staff Nurses: A & E units
Student Nurses: 5

Labour Room and Delivery Room:

Head Nurse: 1
Staff Nurses: 4
Student Nurses: 4

VII. BUDGET (If Available)

For One Year:

(One Dollar = 25 Pakistani Rupees)

Pay for the Team and Programme MO

	Salary	Mos.	Total	
Obstetrician	5,000	12	60,000	
Paediatrician	5,000	12	60,000	
Paeds Nurse	2,000	12	24,000	
Programme MO	6,000	12	72,000	
TEAM & PROGRAM MO			216,000	
Copying Machine			60,000	
Computer			80,000	
Projector			50,000	
Overhead Projector			50,000	
Stationery			20,000	
Posters			10,000	
Slides			10,000	
Films			10,000	
Transparencies			4,000	
Other			50,000	
TOTAL			Rs 560,000	£ 22,400

9/1

I. INTRODUCTION

The advantages of breastfeeding over artificial feeding are well known. They include reduced infant mortality and morbidity, improved infant nutrition, birth spacing. Uterine involution, reduced postpartum bleeding, psychological advantages for mother and baby and economic advantages. There is, however, a trend in giving pre-actael feeds, poor initiation of breastfeeding and early weaning. This is more apparent in urban areas, due to the inclusion of mothers in the working force, the influence exerted by the most affluent urban mothers as role models, promotion of breast milk substitutes and inadequate attention to breastfeeding and lactation management by health personnel.

A. Background Information

The Uganda Lactation Management Education Team (ULMET) started in 1989 at Mulago Hospital. This is a teaching hospital for nurses/midwives, paediatric and medical students. It is also a referral national hospital.

B. Location

It is located in a capital city of Uganda, East Africa. It is found in the centre of the country.

Current Situation, ULMET is as follows:

Doctors	5, but only 2 are actively involved
Nurses/Pediatric/ Psychiatric/Midwives	4
Nutritionist	1
Health Visitor	2
Dietitian	1

The ULMET Clinic is run on a daily basis by our full time work, with other members alternatively. Specific referral cases, on Tuesday is headed by ULMET doctors and other members of ULMET.

Also health talks are given in antenatal and maternity wards and two supporting mother clubs, found in the radius of 5 kilometers away.

C. Statement of the Problem

There is inappropriate of initiation of breastfeeding maintenance and weaning practices.

II. GOALS AND OBJECTIVES

A. Goal

To improve initiation of breastfeeding practices including weaning among mothers in and around Mulago Complex.

B. Objectives

1. By the end of 3 months period, all the hospital administrators should be aware of the breastfeeding problems.
2.
 - a. All health workers of old Mulago Hospital attached to maternity, paediatric wards will acquire knowledge and skills to enable them to manage breastfeeding successfully.
 - b. Every year 10% of new Mulago Health workers in labour, paediatric units will acquire knowledge and skills to enable them to manage breastfeeding successfully.
3. To increase availability of clinic services one week every year from the current once a week so that by the end of 5 years will be run daily.
4. Outreach Activities
 - a. Increase home visiting services from the current zero to once weekly. In the first year and increasing accordingly, such that by the end of 5 years we will be able to visit 5 mothers a week or 260 mothers a year. These visits are on identified high risk mothers, for example, the twin mothers, young mothers.

III. STRATEGIES AND ACTIVITIES

- A. Report about Wellstart to Mulago Hospital administrators.
- B. Formal and informal meetings with administrator about breastfeeding and its problems.
- C. We need to develop syllabus for training courses to health workers.
- D. Assemble all resources.
- E. Select and invite the trainers.
- F. Assessment of the outcome (evaluation).
- G. Get equipment, e.g., a sterilizer, cups, breast pumps, linen, furniture, etc.
- H. Persuade our hospital authorities to give us more full time workers, about three.

- I. Select and TRAIN an area, mobilize community leaders who will assist to mobilize mothers and then form mother support groups.

IV. ORGANIZATION AND STAFFING

We have to organize and invite facilitators:

- A. Wellstart graduates (training)
- B. ULMET members (training)
- C. Faculty of Obstetric and Gynaecology (training)
- D. Tutors for nurses and Midwifery Training School (clinical)
- E. Mulago Hospital authorities to give more full time workers (clinical)

V. BUDGET

A.	Development of syllabus and hours in kind and materials	\$500
B.	Hiring of premises	\$in kind
C.	Teaching materials	\$100
D.	Salary for faculty, 2 hours per	\$500
E.	Per diem for participants	\$375
F.	Food and refreshments	\$500
G.	Transport, communication and outreach	\$100
H.	Contracted services, e.g. typing, porters, etc.	\$200
I.	Contingency fund	\$200
	Total	\$1975 x 2 = \$3850

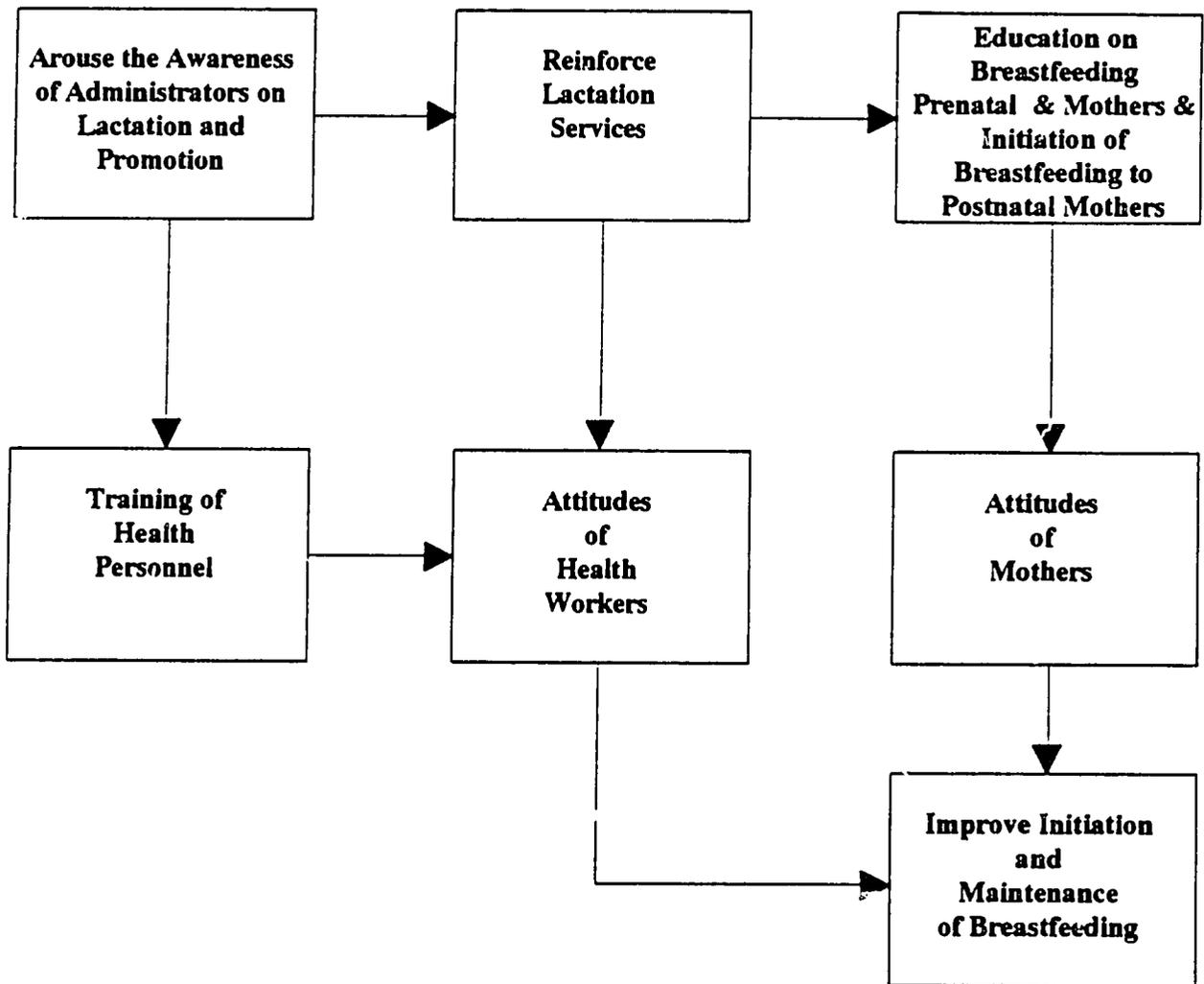
VI. EVALUATION

- A.
 - 1. Written acceptance letter from administrators following our report after Wellstart participation.
 - 2. Number of full time health workers in breastfeeding clinical services. As the result of approval of our administrators.
- B.
 - 1. Numbers of old Mulago Hospital workers trained in breastfeeding management.
 - 2. % of new Mulago Hospital Health workers trained in breastfeeding management.
- C. Pre and post test % of acceptable answers.
- D. Number of days in lactation service, will be available.
- E. Number of home visits.

F. Mothers

1. How many mothers initiated breastfeeding within $\frac{1}{2}$ hour.
2. How many mother-initiated breastfeeding and did exclusively breastfeeding for the first four months.

OPERATION MODEL



BREASTFEEDING EDUCATION, PROMOTION, AND PROTECTION PROGRAM
SOUTHWESTERN REGION, UGANDA
MBARARA HOSPITAL, UGANDA

SEPTEMBER, 1991

Proposal by:

Dr. Busingye E.L. Kigyagi, Medical Officer Paediatrics

**Mrs. Jocelyn M. Tindiwegi, Nursing Officer In-Charge
Maternity Unit**

**Ms. Keirungi Susan, Nursing Officer In-Charge Antenatal Unit
Mbarara Hospital
Uganda**

1.0 INTRODUCTION

Breastfeeding has so far been unchallenged by any other means in providing nutrition for growth and development. It has a unique biological and emotional influence on the health of both the mother and baby.

2.0 BACKGROUND

The Southwestern region includes Mbarara, Kabale, Kabarole, Rukungiri, Kasese, and Bushenyi districts. The regional headquarters are in Mbarara. There are both government and non-government hospitals in the region. There are three nurse training schools in Mutolere and Nyakibale hospitals, which are both non-government hospitals and one government nurse and midwifery training school. The nurse training school in Mutolere trains both nurses and midwives. There is one medical school in the region with Mbarara Hospital as the University teaching hospital. In all the above centres, little attention is paid to the problems of breastfeeding in both the mother and newborn.

<u>District</u>	<u>No. of Government Hospitals</u>	<u>No. of Non-government Hospitals</u>
1. Mbarara	2	1
2. Bushenyi	1	1
3. Kasese	1	3
4. Kabarole	2	2
5. Rukungiri	1	2
6. Kabale	1	1

3.0 PROFILE

Mbarara Hospital is the regional referral hospital and is the teaching hospital for Mbarara University of Science and Technology Medical School. It is a 250-bed capacity hospital, but this is still to be increased.

Total Employees:

Doctors:	25
Nurses:	50
Paramedics:	25
Non-established:	100 (?)

Annual births:	1750
Babies < 2kg bwt:	0
Premature babies:	42
C-section deliveries:	133
Mothers who get ANC:	4112

Normal deliveries stay in the hospitals for a period of 12-24 hours.

C-section mothers and babies stay for 8-10 days.

Babies delivered by C-section start breastfeeding 4-24 hours.

Complicated deliveries, e.g. PPH, PET, assisted vaginal deliveries stay for a period of 2-7 days.

Normal deliveries are seen post-natally after 6 weeks. (both the mothers and babies are seen)

C-sections are seen after 2 weeks post-natally. (both the mothers and babies are seen)

4.0 PROBLEMS

In spite of the widespread breastfeeding, it is of poor quality. The weaning methods are improper and there is a high evidence of malnutrition.

- 4.1 There is improper initiation of breastfeeding because of a small overcrowded delivery room, limited manpower, giving of prelacteal feeds, and lack of trained staff in breastfeeding management.
- 4.2 Lack of space and facilities to provide clinical services for the promotion and support of lactation.
- 4.3 Generally because of the previously mentioned problems, there is lack of establishment of breastfeeding when mothers are discharged and there is no follow-up thereafter.
- 4.4 Health workers are particularly lacking in the knowledge and importance of exclusive feeding.
- 4.5 There is a high rate of early introduction of solids and poor weaning methods leading to a high prevalence of malnutrition and gastroenteritis and consequently dehydration. These contribute to the prevalent high morbidity and mortality.
- 4.6 There is inadequate nutrition counseling/support for pregnant and lactating mothers.
- 4.7 Women workload -- because of the poor economic status in the country women have to work in order to contribute to the day-to-day running of homes.

5.0 JUSTIFICATION

In view of the above, there is a great need in the region to weaning practices, increase and maintain proper knowledge regarding breastfeeding in the hospital community and the region.

5.1 Specific Objectives

- 5.1.1 Arouse awareness among administrators about the importance of breastfeeding and difficulties associated with breastfeeding.

5.1.1.1 The administrators will include medical superintendent, senior nursing officer, hospital secretary and the ward in charge of maternity, paediatrics and antenatal units.

5.1.1.2 Within three months all the hospital administrators will have been made aware of the importance of breastfeeding and the difficulties associated with it.

5.1.2 In two years all health professionals in paediatrics, maternity, and antenatal units will have acquired knowledge and skills to enable them to manage breastfeeding successfully.

5.1.3 Within the following three years, 72 health professionals from six government and six non-government hospitals in six districts will have been trained.

5.1.4 Within three months we will be able to offer lactation clinical services to breastfeeding mothers.

5.1.5 We will be able to carry out outreach activities within six months.

6.0 LOCATION

The program centre will be in Mbarara Hospital. The services will be offered in the paediatric ward. The education and training will be carried out in one of the lecture rooms in the medical school.

7.0 STRATEGIES AND ACTIVITIES

7.1 Arouse awareness of hospital administrators.

7.1.1 Prepare and present a report of our acquired knowledge and experience while at Wellstart to the Ministry of Health and the hospital administrators.

7.1.2 Formal and informal discussions with our administrators.

7.1.3 Conduct a scientific seminar for hospital administrators. The vice chancellor; dean of the medical school and hospital superintendent; hospital secretary; university secretary; heads of the departments of paediatrics, obstetrics & gynaecology, public health, and surgery medicine; and ward incharges of paediatrics, maternity, medical, surgical, and antenatal units will be invited for the seminar. In addition, the district administrator, district council chairman, town clerk, district executive secretary, and RCIV chairman will be invited.

7.2 Training and Education

7.2.1 Learning and teaching aids.

A syllabus will be developed. A slide projector, camera to take pictures for slides, overhead projector, transparencies, and transparency markers will be needed, as will a flip chart board and flip charts.

7.2.2 Hospital and regional courses.

The following activities will apply to both of these courses:

7.2.2.1 Selecting and inviting faculty: ten resource persons per course to be invited from among:

Wellstart alumni
ULMET members
Ministry of Health faculty
Medical school faculty
District health team

7.2.2.2 Preparing training/teaching materials and schedules.

7.2.2.3 Select and invite participants.

7.2.2.4 Provide the training. Two operational courses of one week each year for five years: 12 participants.

7.2.2.5 Follow-up the teams' activities with technical support.

7.2.2.6 Assess outcome of the training through pre-training and post-training KAP survey.

7.2.3 Office furniture, equipment, and supplies.

The main furniture to be acquired will include one table, four chairs, two shelves, two file cabinets, a small photocopier, paper, pens, clips, pencils, stapler, and staples, as well as a puncher will be necessary for both the training and clinical services.

7.3 Clinical and Support Services

These are currently non-existent and therefore will be operated once a week in the first year and this will be increased by one day a week every year such that by the end of five years the services will be offered on a daily basis. The services will include education to mothers about proper nutrition during lactation, assisting mothers with induction of lactation, relactation, and maintenance of successful lactation. Outreach activities will increase from the current zero times a week to once weekly in the first year and increase accordingly such that by the end of five years we will be able to visit five mothers a week or 250 mothers a year. The hospital-trained trainers from the region will be encouraged to establish lactation clinics in their institutions, at least one clinic to open every year. Human resources for services: Wellstart alumni, hospital-trained staff, and departments of Ob/Gyn and Paediatrics. A room for high risk neonates which is

non-existent currently will be requested and acquired and in here B/F for these neonates will be established. In the maternity unit efforts to initiate B/F within the shortest possible time both in the normal deliveries and C-sections. This will enable us to put an end to the current problem of giving prelacteal foods.

8.0 ADMINISTRATION AND SUPERVISION

The Wellstart alumni will form the core team with the physician as the team leader.

9.0 MONITORING AND EVALUATION

This will be continuous throughout the duration of this program.

9.1 Baseline and Follow-up Studies

Baseline information on useful indicators will be collected during the initial phase of the program. The same questionnaire will then be applied toward the end of the program period.

9.1.1 Mother's exit surveys.

A hospital survey of selected mothers as they leave either the antenatal clinic or maternity wards will give us data as to the percent of mothers receiving prenatal and postnatal counseling and examination, percent of mothers commencing breastfeeding within one hour of delivery, and percent of babies receiving prelacteal/supplemental feeds. The indicators can be reassessed periodically during the five-year program.

9.1.2 Knowledge, Attitudes, and Practice survey of health workers.

This survey will be carried out on hospital health professionals and it will be done in the first and fifth years of the program period.

9.1.3 Spot visits.

These will be made by the core team leader starting in year three to assess the breastfeeding promotion activities by the team.

9.2 Selected Indicators

9.2.1 Antenatal activities.

9.2.1.1 Percent of antenatal clinics where breastfeeding function is discussed.

9.2.1.2 Percent of mothers leaving antenatal clinic having their breast examined and advice given.

9.2.2 Initiation of breastfeeding.

9.2.2.1 Proportion of mothers commencing breastfeeding within one hour of delivery

9.2.2.2 Proportion of babies receiving prelacteal/supplemental feeds

9.2.3 Subsequent support.

9.2.3.1 Number of mothers receiving individual postpartum counseling.

9.2.3.2 Number of problem cases visited per week.

9.2.3.3 Number of lactation clinics established.

9.2.3.4 Entry and exit surveys of mothers attending lactation clinics.

9.2.4 Training program.

9.2.4.1 Existence of updated curriculum.

9.2.4.2 Number of operational courses per year.

9.2.4.3 Pre and post tests (percent correct answers).

9.2.4.4 Amount of breastfeeding promotion activities by the trainees.

9.3 Evaluation Design

9.3.1 Chart review.

9.3.2 Pre and post test knowledge.

9.3.3 Hospital practices.

10.0 PROGRAM SCHEDULE

11.0 BUDGET

	1992	1993	1994	1995	1996	TOTAL
Scientific Seminar	200	—	—	—	—	200
SUBTOTAL	200	—	—	—	—	200
Furniture, Equipment, and Supplies						
Furniture						
1 table	250	—	—	—	—	250
4 chairs	120	—	—	—	—	120
2 shelves	200	—	—	—	—	200
2 file cabinets	200	—	—	—	—	200
SUBTOTAL	770	—	—	—	—	770
Equipment:						
1 slide project	600	—	—	—	—	600
1 overhead projector	400	—	—	—	—	400
1 photocopier	1000	—	—	—	—	1,000
1 camera	300	—	—	—	—	300
1 flip chart board	150	—	—	—	—	150
4 hanging scales	in kind	—	—	—	—	0
2 baby dolls	120	—	—	—	—	120
1 baby scale	200	—	—	—	—	200
10 breast shields	60	—	—	—	—	60
1 cassette recorder	600	—	—	—	—	600
2 breast models	400	—	—	—	—	400
1 typewriter	600	—	—	—	—	600
SUBTOTAL	4,430	—	—	—	—	4,430
Supplies						
10 boxes transparencies	100	110	120	130	140	600
4 flip charts	60	65	70	80	90	365
12 rolls photographic films	60	66	72	80	90	368
Miscellaneous (paper, envelopes, folders, markers, pens, pencils, staples, pencils, clips, etc.)	1000	600	660	730	800	3,790
SUBTOTAL	1,220	841	922	1,020	1,120	5,123
Transport						

	1992	1993	1994	1995	1996	TOTAL
1 car	10,000					10,000
1 bicycle	150					150
SUBTOTAL	10,150					10,150
Education and Training	7770	8547	9,402	10,342	11,377	47,438
SUBTOTAL	7,770	8,547	9,402	10,342	11,377	47,438
Clinical Services	676	1490	2460	3600	5000	13,226
Outreach Services	520	570	1260	2100	3080	7,530
SUBTOTAL	1,196	2,060	3,720	5,700	8,080	20,756
Subtotal of Direct	25,736	11,448	14,044	17,062	20,577	88,867
Overhead w/o Direct Costs	2,574	1,145	1,404	1,706	2,058	8,887
TOTAL	28,310	12,593	15,448	18,768	22,635	97,754

SUMMARY BUDGET

Items	1992	1993	1994	1995	1996	TOTAL LIFE
Scientific Seminar	200					200
Furniture, Equipment, and Supplies						
Furniture	770	—	—	—	—	770
Equipment	4,430	—	—	—	—	4,430
Supplies	1,220	841	922	1,020	0	4,003
Transport	10,150					10,150
Education and Training	7,770	8,547	9,402	10,342	11,377	47,438
Clinical and Outreach Seminar	1,196	2,060	3,720	5,700	8,080	20,756
Subtotal of All Direct Costs	25,736	11,448	14,044	17,062	20,577	88,867
Indirect Costs 10%	2,574	1,145	1,404	1,706	2,058	8,887
TOTAL BUDGET	28,310	12,593	15,448	18,768	22,635	97,754

12.0 BUDGET JUSTIFICATION

12.1 Scientific Seminar

In order to arouse the awareness of the administrators, a one-day scientific seminar will be necessary.

12.2 Office Equipment and Supplies

In order to equip the clinic office, one table, four chairs, two shelves, and two file cabinets will be necessary. A Typewriter for typing documents, and documents for storage require file covers. Other items for running an office are included, but mainly include stationery and supplies.

12.3 Education and Training Activities

12.3.1 The same curriculum as for Mulago Center will be used.

12.3.2 The library books and articles require book shelves for storage. Slide collections will be added continuously.

12.3.3 No audiovisual aids are currently available. The centre should have its own camera to take slide pictures. An overhead projector together with transparencies and markers are essential for teaching, and so are the flip chart board and flip charts. A Small photocopier will be necessary to facilitate the reproduction of educational materials in large numbers, especially during the trainings.

12.3.4 Trainees: The centre will train 120 operational-level staff from Mbarara Hospital and the Southwestern Region. This will be done by training 12 participants at one-week courses twice every year for five years. The budget for training includes travel, per diem, accommodations, meals, teaching materials, and honorarium for facilitators.

12.3.5 Clinical services: The major requirements include stationery, refreshments for health workers on duty, and a small honorarium to motivate them to keep at their work a little longer than they would normally.

Outreach activities: transport has been budgeted for in terms of fuel costs when using personal or departmental vehicles. There will be a small per diem for the staff who will carry out the activities. Portable weighing scales are essential for outreach activities.

12.3.6 Research: KAP and entry and exit surveys will be performed at different points in time as basic data, as well as evaluation data. The cost is incorporated in the National Budget for Mulago Center.

12.3.7 No separate contingency funds is put aside because it is hoped that the built-in inflationary allowance of 10% per annum will cover for most eventualities.

NOTE: The entire budge is in US dollars since the Uganda currency undergoes rapid devaluation.

PROGRAM SCHEDULE						
ACTIVITY	1992	1993	1994	1995	1996	RESPONSIBILITY
Scientific Seminar						Core team (Wellstart alumni)
Develop curriculum	☐					Mbarara Mulago (alumni)
Establish clinic	---					Mbarara Core Team
Operational courses Mbarara Hospital	☐☐	☐☐				Alumni core team, adjunct faculty
Regional operational courses			☐☐	☐☐	☐☐	Alumni core team and adjunct faculty
Breastfeeding and Nutrition Counseling	---	---	---	---	---	Mbarara Wellstart alumni and Centre graduates
Outreach Activities	---	---	---	---	---	Mbarara Wellstart alumni and Centre graduates
Research	---	---	---	---	---	Core team and Centre graduates

101

**MULAGO LACTATION MANAGEMENT,
EDUCATION AND RESEARCH CENTER**

September, 1991

Proposal by:

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Department of Paediatrics and Child Health
Makerere Medical School
P.O. Box 7072
Kampala, Uganda**

SUMMARY

In the light of re-awakened global enthusiasm in the use of human milk, a breastfeeding promotion and support program is proposed to be implemented in Uganda. While incidence of breastfeeding is not of major concern in Uganda, recent experiences have indicated that there are many difficulties encountered by breastfeeding mothers in this country. Moreover, the 1988/89 Uganda Demographic and Health Survey revealed a "trend towards shorter duration of breastfeeding" in the urban population. These could be among the factors responsible for the high prevalence of stunting and infant mortality rate observed in that survey. The proposed program aims at reducing childhood morbidity and mortality through promotion, protection and support of breastfeeding. It is envisaged that the Lactation Management, Education and Research Center will achieve this objective by employing three major strategies: providing clinical support services, educating and training health workers, and carrying out operational research. The program will initially run for five years and it has a built-in evaluation scheme which will terminally advise on any subsequent course of action. For the five year period, the program is estimated to cost US \$1,273,513.

1. Introduction

Breastfeeding has been treasured throughout most cultures and traditions and modern literature abounds in attributes to its practice (1-5). Because of its importance as a child survival strategy, it has become increasingly clear that all possible steps need to be taken to promote, protect, and support breastfeeding. Many individuals and organizations, both lay and professional, as well as many governments, are currently involved in an unprecedented drive to promote this simple, yet vital, strategy. This proposal is in partial response to that challenge.

2. Situation Analysis

Uganda is a tropical country of East Africa, covering an area of 241,038 sq. km, and with an estimated population of 16m. It is one among the least developed with a national per capita income of US \$200 (6). As such, it has a fairly high infant mortality rate approaching 100 per 1,000 live births. Although it is a land of diversity in terms of ethnic sub-cultures, it is fortunate in that all of these sub-cultures value and practice breastfeeding. And, according to the 1988/89 Uganda Demographic and Health Survey (6), the initiation of breastfeeding in the postpartum period is virtually universal. By two months of age, at least 90 percent of mothers are breastfeeding, and the mean duration of breastfeeding is 19.1 months. The same survey indicated, however, that there was a trend towards shortened duration of breastfeeding among the urban populations, although the actual data was not tabulated in the initial printout. The other disturbing finding that came out of that survey was that although Uganda is self-sufficient in terms of food supplies, approximately 40 percent of children under five years have significant reduction in height for age, implying a degree of chronic malnutrition. Factors which contribute to such chronic malnutrition include: inadequate child nutrition and breastfeeding knowledge and practices, repeated/chronic infections, food insecurity and uneven food distribution.

Overall, there is paucity of literature and data related to child nutrition in Uganda apart from a few case studies which were done mainly during the 1960's. The quality of breastfeeding, especially its exclusivity, during the first few months of life, has not been investigated. In the last decade or less, however, a few papers have come out specifically addressing breastfeeding issues (7-11). These have corroborated the presence of several factors which impede the success of breastfeeding. These include lack of 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 arise from insufficient milk syndrome, breast engorgement, sore/cracked nipples, and weaning difficulties. While rooming-in, and even bedding-in, is quite common in most maternity units in Uganda, where 40 percent of mothers do deliver in such institutions, the actual initiation of breastfeeding is beset with difficulties (10). These difficulties stem, in part, from lack of information and/or enthusiasm on the part of the health worker to assist the mother to initiate early breastfeeding, as well as from the frequent use of water and glucose solution pre-lacteal/supplemental feeds. Hardly any health workers have received training in contemporary breastfeeding management. Moreover, there is no written breastfeeding policy for the maternity services as recommended by WHO/UNICEF (12). The need to educate and train health professionals in breastfeeding management is crucial to its success (12,13). Generally, breastfeeding promotion programs have not been in the forefront in Uganda. The Ministry of Health, however, has made some efforts through its MCH and Nutrition Division to encourage breastfeeding.

Non-governmental organizations, including UNICEF and Save the Children Fund, as well as religious bodies, have also made sporadic contributions in that direction. In recent times, four other positive developments have brought hope for the future. Firstly, two teams of Ugandans have undergone lactation management training at Wellstart, San Diego: one during 1988 and the second in 1991, and their training is a real booster to breastfeeding promotion activities.

Secondly, a small but active non-governmental organization, the Uganda Lactation Management and Education Team (ULMET), sprang up to increase awareness on breastfeeding issues in particular and child nutrition in general. This organization is already making visible contributions to breastfeeding promotion and support.

Thirdly, the Department of Food, Science and Technology at Makerere University has developed a project known as Integrated Approach to Nutrition Education and Training. One of the major tasks of this project is to examine curricula of all schools, colleges and higher institutions of learning with a view to incorporating a strong food and nutrition component in each one of them. Breastfeeding and growth monitoring feature prominently in the suggested changes in all these curricula.

Lastly, the government of Uganda is seriously developing a food and nutrition policy which has hitherto been lacking, and this is a positive step in the desired direction.

3. Statement of the Problem

In spite of widespread breastfeeding and food abundance, there is rampant malnutrition in Uganda. The breastfeeding itself is of low quality and is associated with weaning difficulties; its duration is declining in urban areas. There is generally low level of advocacy for breastfeeding, and health workers in particular are insufficiently trained and motivated to promote, protect and support breastfeeding. There is a thin database on child nutrition in general, and breastfeeding in particular in the Ugandan context.

4. Justification

Given the above situation and statement of the problem, it becomes imperative to devise means of improving and sustaining both the quality and duration of breastfeeding through increased advocacy, training, and research so as to reduce malnutrition, morbidity, and mortality, as well as alleviate the possibility of a stunted future Ugandan generation.

5. Goals, Aims and Objectives

5.1 Program Goal

To contribute to a reduction of nutritional and nutrition-related morbidity and mortality among Ugandan children through promotion, protection, and support of successful breastfeeding and weaning.

5.2 General Aims

- 5.2.1 Set up at Mulago an information, education, training and research center on breastfeeding management.
- 5.2.2 Provide continuous education and training for health workers in Mulago and other health facilities in Uganda.
- 5.2.3 Consolidate counseling and support services to expectant and nursing mothers in Mulago.
- 5.2.4 Assist trainee teams to establish similar services in their places.
- 5.2.5 Increase awareness among Ministry of Health officials and some hospital administrators about breastfeeding concerns.

5.3 Specific Objectives

These will be under Center and Service Objectives

5.3.1 Center Objectives

- 5.3.1.1 Develop a curriculum for a one week operational level training course within three months.
- 5.3.1.2 Develop a curriculum for a two week regional educators course within one year.
- 5.3.1.3 Establish a Lactation Management, Education and Research Center at Mulago within one year.
- 5.3.1.4 Establish channels of continuous information exchange:
 - 5.3.1.4.1 Publish a quarterly educational newsletter starting by three months.
 - 5.3.1.4.2 Establish a 100 participant annual information exchange forum within one year.
 - 5.3.1.4.3 Put out one weekly media broadcast in Luganda by year one.
 - 5.3.1.4.4 Put out one weekly media broadcast in Runyakitara by year two.
 - 5.3.1.4.5 Put out one weekly media broadcast in English by year three.
- 5.3.1.5 Fifteen physicians, nurses, midwives, medical assistants to acquire competence as national trainers in breastfeeding by the end of three years.

5.3.1.6 One physician to become competent as a national master planner by the end of three years.

5.3.1.7 Four hundred twenty operational staff to develop competence in managing day-to-day breastfeeding situations:

Year 1 = 60
Year 2 = 45
Year 3 = 75
Year 4 = 105
Year 5 = 135

5.3.1.8 Forty health professionals to acquire knowledge and skills as regional educators, ten every year starting year two.

5.3.1.9 Six Ministry of Health officials and hospital administrators to become activated as supporters of breastfeeding promotion.

5.3.1.10 Set up a small data bank at the Mulago Lactation Management, Education and Research Center within one year.

5.3.1.11 Research into breastfeeding issues including KAP survey and other research projects as might arise.

5.3.2 Service Objectives

5.3.2.1 Number of mothers receiving lactation consultation services around Mulago Hospital to increase from the current average of one per day to five per day by the end of five years.

5.3.2.2 Sessions on prenatal nutrition and breastfeeding information exchange to increase from current one to five per week by year five.

5.3.2.3 Individual counseling of postnatal mothers to rise from current 1% to 10% by five years.

5.3.2.4 Follow-up and home visiting activities to rise from current 0 to one per week per program year.

5.3.2.5 Establish lactation clinic consultancy services in one hospital every year.

6. Location

The Center will be based at Mulago. The support services, including the lactation clinic, are already housed in Old Mulago Hospital. The data bank and educational and training facilities will be located at the Diarrhoea Training Unit. Space is already available for this activity and it is envisaged that the DTU will function as a multi-purpose continuing education unit combining diarrhoea, lactation and acute respiratory infection activities.

Additional space for the administrator's office will be sought from the Medical School, especially the Department of Paediatrics and Child Health.

7. Strategies and Activities

7.1 Establishment of a Mulago L.M.E.R. Center

7.1.1 Director

The Wellstart Fellow will act as part time Director of the Center. He will be the Chairman of the Supervisory Committee.

7.1.2 Deputy Director

The second senior fellow to deputize for the Director.

7.1.3 Administrator/Secretary

This will be a full time position. The Supervisory Committee will invite and consider applications for the post and select a suitable candidate. He/she will be in charge of the office, library, furniture, equipment and supplies. He/she will be directly responsible to the Director. The day-to-day administrative and secretarial work will be his/her responsibilities.

7.1.4 Supervisory Committee

This Committee will be responsible for deciding on major issues and policies relating to the program activities. It will include:

- 2 Wellstart Senior Fellows (Deputy and Director)
- 1 DTU physician
- 1 Medical School representative
- 1 Mulago Hospital representative
- 1 Ministry of Health representative
- 1 School of Nursing and Midwifery representative
- 1 Wellstart alumni
- 1 ULMET member
- 1 Administrator/Secretary to be secretary to Committee

7.1.5 Supporting Staff

A driver will be recruited to take charge of the Center vehicle to be used for various program activities. In addition, a Messenger/Cleaner will be needed to assist the Administrator/Secretary in keeping the office in order, as well as running some other minor errands. A word processor, typist and library assistant will also be required. A second driver will be recruited as the program expands.

7.1.6 Office Furniture, Equipment and Supplies

The main furniture to be acquired will be two tables, six chairs and two filing cabinets. One computer and printer, a photocopier, computer paper, computer

ribbons and diskettes will be required. Paper, pens, clips, pencils, stapler and staples, as well as a puncher will be acquired. A FAX machine will facilitate easy communication. ProCite and associated software will ease data retrieval.

7.1.7 Data Bank

A small collection of books, pamphlets and reprints from Wellstart and IBFAN are already available. More of such materials will be sought from these and other donor sources, and the quarterly newsletter plus the annual scientific meeting report will continuously be added to the collection. A slide collection will be added. Two shelves will be needed to store these items.

7.1.8 Center Transport

A vehicle will facilitate Center staff transport and movement to and from all necessary contact points for the day-to-day activities and manning of the office. The messenger can use a bicycle for small errands. A second vehicle will become necessary with increasing activity.

7.2 Training and Education

7.2.1 Learning/Teaching Aids

Curriculum materials will be developed and printed. A slide projector is already available, but will need replacements, such as bulbs and additional slide mounts and holders. A camera will be acquired to take pictures for slides. An overhead projector, transparency and transparency markers are essential. Flip charts and a flip chart board will be added. Two cassette recorder/players and accompanying cassettes will be required. A technical advisor will be invited from outside Uganda to review the final curriculum with the core team before training commences.

7.2.2 Operational and Educators Courses

The following activities will apply to both of these courses:

Finalizing the curriculum - see Annex

Selecting and inviting faculty: 10 resource persons per course to be invited from among:

- Wellstart Fellows and alumni
- ULMET members
- DTU faculty
- Medical and nursing school faculty
- Ministry of Health faculty
- Technical support staff from abroad for educator's courses

Preparing learning/teaching materials and schedules

Select and invite participants

Provide the courses:

2 operational courses of one week each, during year 1: 15 participants each course

1 operational and 1 educators' course (2 weeks, 10 participants each) every year from year two to five.

Each team of educators to prepare and execute a plan of action, including an operational level training course in their area.

Follow-up the teams' activities with technical support.

Employing the same curriculum, the Mbarara core team of Wellstart alumni will conduct two courses every year for 15 operational level staff each time. For the educators courses, technical support will be sought so that two external trainer/educator from part of the teaching faculty.

7.2.3 National Educators

Fifteen multidisciplinary health professionals to achieve national level training competence by undergoing the four week Wellstart LME course in San Diego.

7.2.4 Wellstart Fellowship

An additional physician to undergo the seven week Wellstart Fellowship so that the two fellows act as Master Planners.

7.2.5 Three officials from the Ministry of Health, and one administrators each from Mulago, Mbarara, Mbale and Singa Hospitals to attend a two week course at Wellstart.

7.3 Support Services

7.3.1 The lactation clinic at Old Mulago Hospital currently offers full lactation services once a week. This will be extended by an additional day every year so that by the end of five years the full service will be available on a daily basis. The antenatal clinics and postnatal wards are now visited once weekly.

Again these sessions to increase by a day every year till five day coverage by five years. Currently, outreach services are unavailable. It is envisaged that one problem case will lead to home visiting once a week by the end of the first year, increasing to five times a week by year five. Further, the center-trained trainers will be encouraged and assisted to establish lactation clinics in their institutions, at least one clinic to open every year.

Human resources for services: Center trained Mulago staff; ULMET; Wellstart alumni; Departments of OB/Gyn and Paediatrics.

7.3.2 The Mbarara core team will organize clinical services on a similar model and these should be in place by the first year of the course.

7.4 Information Exchange Systems

7.4.1 Newsletter

To be published every three months. A simple eight page document is planned to summarize local, international and research news with special reference to

breastfeeding and child survival and nutrition related issues. It will be distributed to all Center trainees and faculty, as well as other interested individuals and organizations.

7.4.2 Radio Broadcasts

To revive ULMET's weekly broadcast on breastfeeding on Radio Uganda. The Luganda version should be a regular feature by the end of year one; a Runyakitara version by end of year two and an English version by end of year three.

- Select discussants: ULMET, Wellstart, and Center trainees
- Prepare materials
- Interact with the radio program producers and arrange recordings

7.4.3 Annual Scientific Meeting

To be a regular forum for information exchange; it will be arranged for 100 people each time.

- Prepare dates, venues and timetables
- Call for papers and speakers
- Invite participants

The speakers and participants will be invited from all corners of the country and from abroad whenever possible.

- Prepare and publish a report of the meeting

7.5 Research Promotion

- #### 7.5.1
- Interview of mothers leaving the prenatal clinics at Mulago
 - Interview of mothers leaving the postnatal wards at Mulago
 - KAP survey of health workers
 - KAP survey of a community near/in Kampala

These would provide baseline data during year one, but will be repeated at three and five years as part of evaluation.

- #### 7.5.2
- Invite and receive research proposals from individuals, groups, organizations or institutions. Receive such proposals and fund or assist in soliciting funds to implement those deemed relevant and feasible. Priority will be given to operational issues, including projects to assess the lactation services.

8. Administration and Supervision

The first Wellstart Senior Fellow will be part time Director of the Center and act as overall Program Coordinator. When a second Senior Fellow becomes available, he/she will deputize for him. These two will be answerable to the Supervisory Committee and program sponsor. The day-to-day activities and administration procedures shall be the responsibility of a full time Administrator who will also deal with secretarial, correspondence, and financial accounting matters on the advice of the Director.

The Supervisory Committee, under the chairmanship of the Director, will meet every three months during the first year, and thereafter, biannually.

9. Monitoring and Evaluation

Monitoring and evaluation will be continuous throughout the duration of this project.

9.1 Baseline and Follow-Up Studies

Baseline information on useful indicators will be collected during the initial phase of the program. The same questionnaire will then be applied towards the end of the program period.

9.1.1 Mothers' Exit Surveys (See Annex 3)

A hospital survey of selected mothers as they leave either the antenatal clinic or the maternity wards will yield data as to percent of mothers receiving prenatal and postnatal counseling and examinations, percent of mothers commencing breastfeeding within one hour of delivery, and percent of babies receiving prelacteal/supplemental feeds. The indicators can be reassessed periodically during the five year Program.

9.1.2 Knowledge, Attitudes and Practice Survey of Health Workers

This KAP survey on hospital health professionals will be implemented during first and fifth years of the Program period.

9.1.3 KAP Survey of Neighborhood Community During Years One and Five

9.1.4 Spot Visits

Follow-up visits to the teams of regional trainers to be made by the Director and/or his deputy for on-spot assessment of breastfeeding promotion activities by the team as well as offering other support and/or advice.

9.1.5 Trainees annual reports to be elicited and filed so as to keep track of their activities. The team leader of each group trained to furnish such reports.

At the annual scientific meeting, part of the time will be allocated to evaluation of program activities. Any data from the above activities, research activities and available selected indicators will be reviewed by that meeting. Recommendations from these deliberations can then be utilized by the Program.

Terminally, during the fifth year, a workshop will be arranged including Program organizers, trainees, NGO's, administrators and policy makers to review selected indicators as well as the overall program. This workshop will formulate recommendations for future activities and its report will be forwarded to the Program sponsor, as well as the policy makers in Uganda.

9.1.6 At least one technical expert will be invited to participate in the program evaluation exercise each year and two during the final evaluation workshop.

9.2 Selected Indicators

9.2.1 Antenatal Activities

9.2.1.1 Percent of antenatal clinics where breastfeeding/nutrition is discussed.

9.2.1.2 Percent of mothers leaving antenatal clinic having their breasts examined, and advice given.

9.2.2 Initiation of Breastfeeding

9.2.2.1 Proportion of mothers commencing breastfeeding within one hour of delivery.

9.2.2.2 Proportion of babies receiving prelacteal/supplemental feeds.

9.2.3 Subsequent Support

9.2.3.1 Number of mothers receiving individual postpartum counseling.

9.2.3.2 Number of problem cases home visited per week.

9.2.3.3 Number of lactation clinics established.

9.2.3.4 Entry and exit surveys of mothers attending lactation clinics.

9.2.4 Training Program

9.2.4.1 Existence of updated curriculum.

9.2.4.2 Number of courses per year (operation and educators).

9.2.4.3 Number of professionals trained/educated, by category.

9.2.4.4 Pre- and post-tests (percent acceptable answers).

9.2.4.5 Number of national educators and fellows completing training.

9.2.4.6 Number of books, journals, pamphlets, slides in the data bank.

9.2.4.7 Amount of breastfeeding promotion activities by Center trainees.

- ° Establishment of lactation consultation services
- ° Number of operational staff trained by regional teams
- ° Other indicators as in 9.2.1, 9.2.2, and 9.2.3

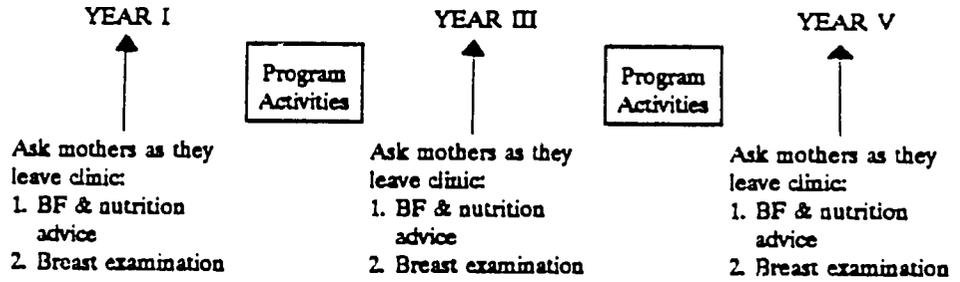
9.2.5 Research

9.2.5.1 Number of research projects completed

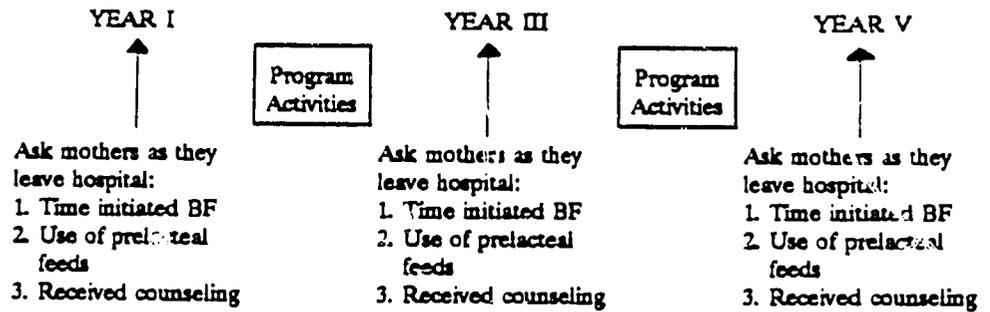
9.2.5.2 Whether the Program was able to utilize research findings.

9.3 Evaluation Design

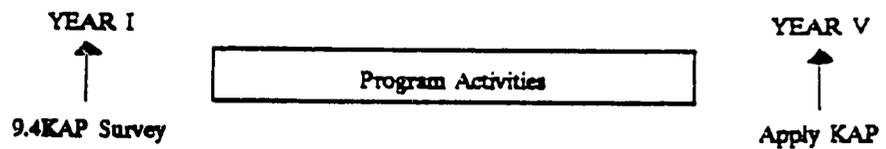
9.3.1 Prenatal Clinic



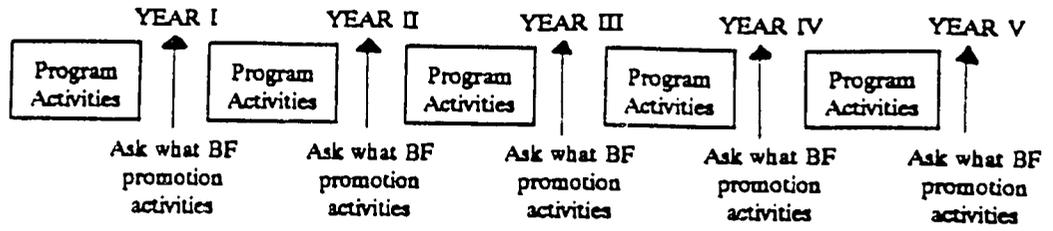
9.3.2 Hospital



9.3.3 Health Workers



9.4.1 Center Trainees



10. Program Schedule See Annex

115

11. Budget

	1992	1993	1994	1995	1996	TOTAL
11.1 Furniture, Equipment, and Supplies						
11.1.1 Furniture						
3 tables	750	-	-	-	-	750
10 chairs	300	-	-	-	-	300
3 file cabinets	300	-	-	-	-	300
20 classroom chairs	400	-	-	-	-	400 (in kind)
4 book shelves	200	-	-	-	-	200
SUBTOTAL	1,950	0	0	0	0	1,950
11.1.2 Equipment						0
2 slide projectors	400	-	-	-	-	400 (in kind)
2 overhead projector	800	-	-	-	-	800
2 VCR's	600	-	-	-	-	600
2 Caramate projectors	2200	-	-	-	-	2,200
6 slide trays	60	-	-	-	-	60
1 computer and hard drive	2795	-	-	-	-	2,795
1 laser printer	2160	-	-	-	-	2,160
1 dot matrix printer	500	-	-	-	-	500
1 photocopier Large	1500	-	-	-	-	1,500
Small	1000					1,000
1 FAX machine	1200	-	-	-	-	1,200
1 ProCite software	395	-	-	-	-	395
2 cassette recorder/players	300	-	-	-	-	300
2 cameras	600					600
2 flip chart boards	300	-	-	-	-	300
8 hanging scales	800	-	-	-	-	800
2 baby scales	400	-	-	-	-	400
4 Breast Models Complete	1700	-	-	-	-	1,700
Chest Models	360	-	-	-	-	360
4 Baby dolls	220	-	-	-	-	220
12 Marshall-Kaneson manual pumps yearly	288	300	330	370	410	1,698
24 Pigeon nipple pullers yearly	180	200	220	250	280	1,130
24 Nipple shields yearly	90	100	110	120	130	550
SUBTOTAL	18,848	600	660	740	820	21,668

	1992	1993	1994	1995	1996	TOTAL
11.1.3 Supplies						0
2 boxes floppy diskettes	40	45	50	55	60	250
20 boxes transparencies	200	220	240	260	280	1,200
8 flip charts	120	130	140	160	180	730
24 rolls photographic film	120	132	144	160	180	736
miscellaneous (paper, envelopes, folders, markers, pens, pencils, staples, puncher, binder, staples, clips, pads, tabs, labels, etc.)	1000	600	660	730	800	3,790
SUBTOTAL	1,480	1,127	1,234	1,365	1,500	6,706
11.2 Personnel and Administrative Expenses						0
Director	2400	3960	4400	6800	8400	25,960
Deputy Director	-	800	2900	3200	5640	12,540
Administrator	2400	2640	2900	3400	3760	15,100
Typist	1000	1200	1350	1500	1750	6,800
Word Processor	-	-	2000	2400	2800	7,200
Driver 1	1000	1200	1350	1500	1750	6,800
Driver 2	-	-	1350	1500	1750	4,600 (in kind)
Library Assistant	800	880	980	1200	1400	5,260 (in kind)
Office Messenger	600	680	750	830	900	3,760 (in kind)
Office Cleaner	600	680	750	830	900	3,760 (in kind)
Supervisory Committee	480	270	300	330	360	1,740
Fringe benefits	2380	3077	4757	5872	7352	23,438
SUBTOTAL	11,660	15,387	23,787	29,362	36,762	116,958
11.3 Transport						0
Vehicle	15000		18000			33,000
Fuel	5200	5800	13000	15000	17000	56,000
Maintenance	5200	8000	20000	30000	40000	103,200
Bicycle	150					150
Maintenance of bicycle	250	300	350	400	500	1,800
SUBTOTAL	25,800	14,100	51,350	45,400	57,500	194,150

	1992	1993	1994	1995	1996	TOTAL
11.4 Other Facilities						
Training Hall	400	440	480	550	600	2,470
Water and electricity	1000	1200	1400	1600	1800	7,000
Lactation clinic offices	1200	1300	1500	1650	1800	7,450
SUBTOTAL	2,600	2,940	3,380	3,800	4,200	16,920 (in kind)
11.5 Education and Training						0
Curriculum development	2000	1000	800	800	800	5,400
Library books and materials	1000	500	550	600	650	3,300
Slides	3000	2000	2000	2000	2000	11,000
Fellowship course	15000 (in kind)	16386	-	-	-	31,386
National educators courses	145432 (83104 in kind)	68560	37708	-	-	251,700
Regional educator courses	-	7140	7850	8600	9500	33,090
Training support	-	8000	8800	9800	10500	37,100
Operation level courses	15540	12810	23485	36165	51230	139,230
Administrators courses	42500	-	-	-	-	42,500
SUBTOTAL	224,472	116,396	81,193	57,965	74,680	554,706
11.6 Other Information Exchange Media						0
Local postage and communication	50	60	70	80	90	350
Newsletter	340	160	180	200	225	1,105
Radio messages	780	1720	2835	3300	3700	12,335
Scientific meeting	2910	3200	3750	4100	-	13,960
SUBTOTAL	4,080	5,140	6,835	7,680	4,015	27,750
11.7 Clinical Services						0
Mulago Hospital activities	676	1490	2460	3600	5000	13,226
In kind salaries	500	1200	1500	2400	3000	8,600
Mulago outreach activities	520	1140	1890	2800	3850	10,200
Re-entry clinical services	676	2235	6150	12600	22500	44,161
In kind salaries	500	1500	4500	8600	1600	16,700
Clinic's outreach activities	520	855	2225	4450	8095	16,145
SUBTOTAL	3,392	8,420	18,725	34,450	44,045	109,032
11.8 Research	4500	6000	8000	10000	15000	43,500
11.9 Monitoring of Re-entry Programs	200	500	1000	1500	2500	5,700

	1992	1993	1994	1995	1996	TOTAL
11.10 Evaluation						0
Data Collection	3000	3000	4500	4000	8000	22,500
Workshop	-	-	-	-	5500	5,500
Technical Support	4000	4400	4900	5400	12000	30,700
SUBTOTAL	7,000	7,400	9,400	9,400	25,500	58,700
SUBTOTAL OF DIRECT EXPENSE	305,982	178,010	205,564	201,662	266,522	1,157,740
11.11 Overhead (10% of Direct Costs)	30,598	17,801	20,556	20,166	26,652	115,773
TOTAL	336,580	195,811	226,120	221,828	293,174	1,273,513

SUMMARY BUDGET

ITEMS	1992	1993	1994	1995	1996	TOTAL LIFE OF PROJECT	IN KIND COSTS	AMOUNT REQUESTED
Personnel:								
Salary	9280	12,310	19,030	23,490	29,410	93,520	17,380	76,140
Fringe Benefits	2380	3077	4757	5872	7352	23,438		23,438
Furniture, Equipment and Supplies:								
Furniture	1,950	-	-	-	-	1,950	400	1,550
Equipment	18,848	600	660	740	820	21,668	200	21,468
Supplies	1,480	1,127	1,234	1,365	1,500	6,706		6,706
Transport	25,800	14,100	51,350	45,400	57,500	194,150		194,150
Other Facilities	2600	2940	3380	3800	4200	16,920	16,920	0
Education and Training	224,472	116,396	81,193	57,965	74,680	554,706	115,484	439,222
Other Direct Costs	19,172	27,460	43,960	63,030	91,060	244,682	25,300	219,382
Subtotal of All Direct Costs	305,982	178,010	205,564	201,662	266,522	1,157,740	175,684	982,056
Indirect Costs (10%)	30,598	17,801	20,556	20,166	26,652	115,773		115,773
Total Budget	336,580	195,811	226,120	221,828	293,174	1,273,513	175,684	1,097,829

12. Budget Justification

12.1 Office Equipment and Supplies

In order to equip the Center office and its satellite at Mbarara, three tables, ten chairs and three file cabinets will be required. A computer and printer are deemed necessary to facilitate rapid word processing and production of documents, and documents for storage require file covers. Other items for running a usual office are included, but especially stationary and supplies.

12.2 Personnel and Administration

12.2.1 It is envisaged that the Wellstart Fellow will be part time Director of the Center. He would be spending, on average, two hours a day on the Project, and this is time which he would otherwise normally have spent on other income-generating activities outside the hospital. The amount indicated per month would compensate for these other activities. The number of hours will increase progressively.

The Deputy Director will be the second Wellstart Fellow expected by the second year and he/she would deputize for the Director, spending an average of one hour a day on Center activities. The number of hours will increase progressively.

As the program activities intensify, these individuals will be spending more and more time on the project and their remuneration will increase accordingly. The Administrator/Secretary will be an individual with post-secondary secretarial training, including word processing. He/she would be a full time project employee to carry out the day-to-day administrative program activities in conjunction with the Director. The attached salary is as indicated annually. The Supervisory Committee has eight members. In addition, the Director will act as Chairman and the Administrator/Secretary as Secretary to that Committee. The members will receive honorarium at the rate of \$10 per person per session: four during first year and two every year thereafter. At each session, there would be refreshments worth \$20, bringing the total to \$120 for each meeting. Fringe benefits will cover mainly transport and overtime allowance while on Center duties, plus refreshments for Program visitors and workers.

12.2.2 In order to facilitate program activities, a vehicle will be most useful since most employees and workers do not possess personal cars. A mini-bus is envisaged and fuel and maintenance work are indicated. Maintenance includes road license and insurance.

12.2.3 Supporting staff. These are necessary to sustain the day to day activities and their number will increase as the program activities intensify.

12.3 Education and Training Activities

- 12.3.1 The curriculum for each course will have to be finalized and printed. It may, however, require up-dating and reprinting on an annual basis. The cost indicated covers times and materials plus, any necessary hiring of services.
- 12.3.2 The library books and articles required book shelves for storage. Slide collections will be added continuously.
- 12.3.3 In terms of audiovisual aids, a slide projector is already available but will require replacements, especially bulbs and carousals, which have been allowed for under overhead Project annual expenses. Further, the Center should have its own camera for taking slide pictures, and slide mounts or binders will be needed constantly. An overhead projector together with transparencies and markers are essential teaching aids in addition to a flip chart board and flip charts. A copier will facilitate the reproduction of educational materials in large numbers. A second slide projector, overhead projector, a small photocopier, and camera will be utilized by the Mbarara core team. Breast models are useful practicing tools: 2 for Mulago, 2 for Mbarara.

12.3.4 Trainees

- 12.3.4.1 As the Program expands, help from a second Fellow will become essential to sustain the momentum of activities, and so that the second Fellow can cover the first in case of eventualities.
- 12.3.4.2 In order to strengthen the team of educators at the Center, it is proposed that 15 additional participants undergo the four week Wellstart LME course over a three year period. These would include six physician/obstetricians, four medical assistants and five nurse/midwife/nutritionist health workers.
- 12.3.4.3 The Center will educate four teams of regional educators during four courses: one every year starting in the second years.
- 12.3.4.4 The Center will train 90 operational level staff from the Kampala and Central region. This target will be achieved by having 15 participants at one week courses twice during the first year and once every subsequent year. The regional teams of educators will, in turn, be expected to train 15 operational level staff annually after their own courses. The budgets for all the courses include travel, per diem, accommodation, meals, teaching materials and honorarium for facilitators.
- 12.3.4.5 Policy makers and implementers, as well as hospital administrators are known to be very passive concerning breastfeeding, and Wellstart would be extremely helpful in activating and motivating them.

12.3.5 Information Exchange

12.3.5.1 Breastfeeding and nutrition messages will be broadcast on a regular weekly radio program in the three languages mentioned, which among them are understood by at least half of the Ugandan population. Free air space should be obtainable through the World Bank First Health Project. The expenses portrayed cover transport to and from the radio studios as well as honorarium for the participants who will be varied as much as possible within each language.

12.3.5.2 The Center will publish a quarterly newsletter as one means of keeping program participants informed about the program activities and research news related to breastfeeding, child nutrition, and health in general. The cost of printing and distributing about 200 copies for each issue of the newsletter is as indicated in the estimates.

12.3.5.3 An annual scientific meeting is planned for about 100 participants per meeting. The meeting would last a whole day, part of which will be taken up by evaluation of program activities to date. The stipulated costs include travel and per diem for participants and speakers, as well as the cost of producing and printing at least 20 copies of the report of the meeting.

12.4 Clinical Services

While basic salaries for the clinic staff will be paid by either the University or the hospital, an overtime incentive has been budgeted for to motivate the workers. The major requirements are: stationary, including paper and folders, refreshments for health workers while on duty. To keep going a little longer than they normally would. Outreach activities: transport has been budgeted for in terms of fuel costs while using either departmental or Center vehicles. There will be a small per diem for the staff who have to move out of their station for these activities. Portable weighing scales are essential for outreach activities. Breast pumps and breast shields are helpful in managing some clinical situations.

12.5 Research

KAP and entry and exit surveys will be performed at different points in time as basic data as well as evaluation data. Additional research can be funded as proposals come forth and are approved by the Supervisory Committee. It is hoped that research activities will build up as the Program expands, at least one proposal for each additional year, then increasing to five proposals by year five. The average cost per proposal will be US \$1,000.

12.6 Workshop

During the last quarter of the fifth year, the annual meeting will be converted into a workshop of 100 participants to evaluate the five year Program and make recommendations. Such a workshop would last one day and its deliberations will be

embodied in its report. The expenses envisaged include: transport and per diem, meals and refreshments, as well as the preparation, production and distribution of 50 copies of the report.

12.7 Contingency

No separate contingency fund has been set aside but is hoped that the built-in inflationary allowance of 10% per annum will cater for most eventualities. This is in addition to the indirect costs which have been estimated at the rate of 10% of the budget subtotal.

Note: The entire budget is in US dollars since the Uganda currency undergoes rapid and very wide fluctuations.

PROGRAM OUTPUT OF TRAINED PERSONNEL

	Current	1992	1993	1994	1995	1996	TOTAL
Senior Fellow	1	0	1	0	0	0	2
National Educators	8	6	6	3	0	0	23
Regional Educators	0	0	10	10	10	10	40
Operational Staff	0	60	45	75	105	135	420

125

PROGRAM

SCHEDULE

ACTIVITY	1992	1993	1994	1995	1996	LOCUS OF RESPONSIBILITY
DEVELOP CURRICULUM						DIRECTOR + ALUMNI
ESTABLISH CENTER						DIRECTOR + COMMITTEE
COMMITTEE MEETINGS						DIRECTOR
NEWS LETTER						DIRECTOR
SCIENTIFIC MEETING						CENTER STAFF
RADIO BROADCASTS						ULMET + ALUMNI
DATA BANK						DIRECTOR/ADMINISTRATOR
OPERATIONAL COURSES						CENTER + ALUMNI
REGIONAL EDUCATORS						" "
NATIONAL TRAINEES						WELLSTART
SENIOR FELLOW						" "
BREASTFEEDING AND NUTRITION COUNSELING						ALL WELLSTART AND CENTER GRADUATES
ACTATION CLINICS						" "
OUTREACH ACTIVITIES						WELLSTART ALUMNI
RESEARCH						WELLSTART AND CENTER GRADUATES
EVALUATION WORKSHOP						CENTER STAFF

126

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ANNEX 1

CURRICULUM FOR OPERATIONAL LEVEL COURSE

JOB DESCRIPTION

Trainees will become conversant with contemporary breastfeeding management techniques and begin to actively promote, protect and support breastfeeding in their places of work.

LEARNING OBJECTIVES

At the end of the course trainees should be able to:

1. State at least five advantages of breastfeeding.
2. Health educate mothers on preparation for initiation and maintenance of breastfeeding.
3. Provide nutritional advice to expectant and lactating mothers.
4. Describe cultural beliefs and practices affecting breastfeeding in their respective communities.
5. Describe at least five breast and/or breastfeeding problems commonly encountered in their work place and the appropriate action to be taken in each case.
6. Assist mothers to hand express breast milk.
7. Advise mothers on a proper weaning diet from locally available foods.
8. Monitor, and appreciate the importance of monitoring, the growth of a breastfeeding child.
9. Discuss the relationship between breastfeeding and conservation of natural resources.
10. Outline, and appreciate the importance of, the WHO/UNICEF Code of Marketing of Breast Milk Substitutes.

COURSE CONTENT

1. Lactation: anatomical physiology and biochemistry.
2. Breastfeeding: advantages for mother, child, father and community.
3. Breastfeeding: preparation for initiation and maintenance.
4. Unusual circumstances: Preterm baby; EBM, relactation and induced lactation.
5. Breastfeeding problems commonly encountered; possible solutions.

7. Maternal nutrition; weaning and weaning diets.
8. Breastfeeding and ecology.
9. Growth monitoring and its relevance to the breast fed child.
10. Breast milk substitutes and the WHO/UNICEF code.

LEARNING MATERIALS AND METHODS

Use will be made of brief lectures or oral presentations followed by discussions either collectively or in small groups. Chalk and board, slides on slide projectors, transparencies on overhead projectors and flip charts will be made use of. Typed hand-outs, reprints and leaflets will all be employed as necessary. Hands-on practical experiences will be arranged in the antenatal and postnatal clinics, the neonatal special care ward and the lactation clinic at Old Mulago.

RESOURCE PERSONNEL

Administration, the Director, his Deputy and the Center Administration Secretary will between them be responsible for organizing the courses.

Facilitators

These will be recruited from the following groups:

1. Program personnel
2. DTU staff
3. Child Health and Development Centre staff
4. Wellstart alumni
5. Department of Paediatrics
6. Department of Obstetrics and Gynecology
7. Department of Physiology
8. Uganda Lactation Management and Education Team (ULMET)
9. Ministry of Health: MCH/Nutrition Division
10. Where possible, IBFAN Africa regional office

Supporting Staff

During the week of each course it will be necessary to hire transport and catering services. Trainees from outside Kampala will be accommodated at an adjacent hotel.

Transport and Communications

Pre-course			= \$ 30
During course			= 150
Post-course			= <u>20</u>
	Transport Sub-total		= <u>200</u>

Meals and Accommodations

Meals during course			= \$ 400
Accommodation of 15 participants	x	5 days	x \$20
			= <u>1,500</u>
	Meals and Accommodations Sub-total		= <u>\$1,900</u>

Stationery and Supplies

			<u>\$100</u>
	Sub-total of Entire Budget		\$3,700
	Contingency Fund 5%		= <u>185</u>
	Total Budget		= <u>\$3,885</u>

ANNEX 2

CURRICULUM FOR EDUCATORS COURSE

JOB DESCRIPTION

Participants will become conversant with modern breastfeeding management and acquire knowledge, skills and motivation to actively promote, protect and support breastfeeding in addition to training operational level health workers in their regions to do the same.

LEARNING OBJECTIVES

By the end of the course, participants will be expected to be able to:

1. State at least eight advantages of breastfeeding.
2. Health educate mothers on preparation for initiation and maintenance of breastfeeding.
3. Provide nutritional advice to expectant and lactating mothers.
4. Describe cultural norms affecting breastfeeding in their region.
5. Describe, identify, and take appropriate action on at least eight common breast and/or breastfeeding problems.
6. Assist mothers to hand express breast milk and instruct others to do the same.
7. Advise mothers on proper weaning diets from locally available foods.
8. Monitor, and appreciate the importance of monitoring, the growth of the breast fed child and demonstrate the technique to other health workers.
9. Describe the relationship between breastfeeding and conservation of natural resources.
10. Outline, and appreciate the importance of, the WHO/UNICEF Code of Marketing of Breastmilk Substitutes.
11. Outline the advantages and disadvantages of participatory student-centered learning, contrasting them with those of the traditional lecture.
12. Outline the components of successful program planning and evaluation.
13. Develop and utilize a supervisory check list.
14. Organize and run a lactation consultancy service.
15. Assist a mother to organize her day's work plan such that it is conducive to successful breastfeeding whether she is at home or in paid employment.

(2)

38. What was the reason for giving the above? _____

39. Since you came into the hospital for delivery, did any health worker give you advice or information on feeding the baby and yourself? Yes/No

40. If yes, what advice of information was given?

For baby: _____

For mother: _____

41. Did you get advice or information from any other source? Yes/No

42. If yes, what was the source, e.g. radio, written material, relative or friend or other mother?

43. What advice was given?

44. When do you plan to start giving cow's milk or other liquid foods?

_____ Weeks _____ Months _____ Don't know

45. On the basis of what reason will you decide to start these other liquid foods?

46. During your stay in the hospital, what, if anything, helped you or made it easy for you to breastfeed the baby?

47. What, if anything, made it more difficult for you to breastfeed the baby?

48. Do you have any questions or worries about breastfeeding? Yes/No

49. If yes, what question? _____

Thank you very much for spending the time to help us in our study. Your answers will help the hospital to take better care of mothers and babies. In case you ever come across any difficulties with breastfeeding, please come to the breastfeeding clinic at Old Mulago Hospital any Tuesday morning and we shall try to assist you to overcome the problem.

Interviewer's comments and observations:

Delivery Information

18. Date of delivery:

19. Time of delivery: AM/PM [Time elapsed till now: ___ hrs. ___ min.]

20. Type of delivery: SUD/Vacuum/C-Section

21. Condition of baby at delivery:

APGAR Score =
Any complications?

22. Condition of mother immediately after delivery:

Well/Weak/Very ill
Any matter with mother?

Initiation of Breastfeeding

23. When after delivery did you first hold your baby?

Date: Time: [Time elapsed since delivery: __ , hrs. ___ min.]

24. When after delivery did you first breastfeed your baby?

Date: Time: [Time elapsed since delivery: ___ hrs. ___ min.]

25. Who suggested that you breastfeed then? _____

26. Did baby attach and suckle then? Yes/No

27. Did anyone assist you to nurse the baby that time? Yes/No

28. If yes, who was this person? _____

29. Were you sleeping with your baby in the bed, after delivery? Yes/No

30. Was the baby at any time taken away from you? Yes/No

31. If yes, where was the baby taken? _____

32. For what reason? _____

33. For how long did you stay apart? _____

34. How many times did you breastfeed the baby during the last 12 hours? _____

35. Since birth, has the baby received anything to drink apart from breast milk? Yes/No

36. If yes, what was given? Water, glucose solution, tea, cow's milk, ghee?

37. On whose advice was the above given? _____

134

Meals and Accommodations

Meals during course = \$ 700

Accommodation of 10 participants x 12 days x \$20 = 2,400

Meals and Accommodations Sub-total = \$3,100

Stationery and Supplies and Printing of Replica Teaching Material \$750

Sub-total of Entire Budget \$6,800

Contingency Fund 5% = 340

Total Budget = \$7,140

EVALUATION

1. As for the operational level course.
2. Evaluation according to suggestions under: 9.2.4.7 above.

TIME TABLES

To be drawn up near to date of each course.

BUDGET IN U.S. \$

Personnel

10	Chairpersons	x	1 day	x	\$10	= \$ 100
7	Full time facilitators	x	10 days	x	10	= 700
6	Part time facilitators	x	10 days	x	5	= 300
1	Catering officer	x	10 days	x	10	= 100
1	Waiter/cleaner	x	10 days	x	5	= 50
2	Cooks	x	10 days	x	5	= <u>100</u>
Personnel Sub-total						= <u>\$1,300</u>

Participants

Transportation allowance:	10 persons			x	\$ 5	= \$ 50
Per diem:	10 persons	x	12 days	x	10	= <u>1200</u>
Participants Sub-total						= <u>\$1200</u>

Transport and Communications

Pre-course						= \$ 30
During course						= 300
Post-course						= <u>20</u>
Transport Sub-total						= <u>350</u>

COURSE CONTENT

1. Lactation: anatomical physiology and biochemistry.
2. Breastfeeding: advantages for mother, child, father and community.
3. Breastfeeding: preparation for, initiation and maintenance.
4. Unusual circumstances: preterm and sick babies; use of expressed breast milk; relactation and induced lactation; multiple births.
5. Commonly encountered breast and breastfeeding problems; causes, prevention and interventions.
6. Cultural norms as they affect breastfeeding.
7. Maternal nutrition; weaning and weaning diets.
8. Breastfeeding and ecology.
9. Growth monitoring; its relevance to the breast fed child.
10. Breast milk substitutes and the WHO/UNICEF code.
11. Teaching methodology and principles of adult learning.
12. Logistics of a lactation consultancy service.
13. Supervisory skills: relevance and usage.
14. Planning, implementing and evaluating a program.
15. Work, women and breastfeeding: the traditional housewife as contrasted with the salaried or self-employed working mother.

LEARNING MATERIALS AND METHODS

Basically the same as for the operational level course but more emphasis on practical experiences.

RESOURCE PERSONNEL

As for the operational level course.

PARTICIPANTS

Multidisciplinary teams of health professionals will be selected from the larger hospitals in major municipal areas. One team of ten such individuals will be trained every year starting from the second year of the project and they will be scattered over different parts of the country. Each team will consist of physicians, medical assistants and senior nurses and midwives will be given priority for this course.