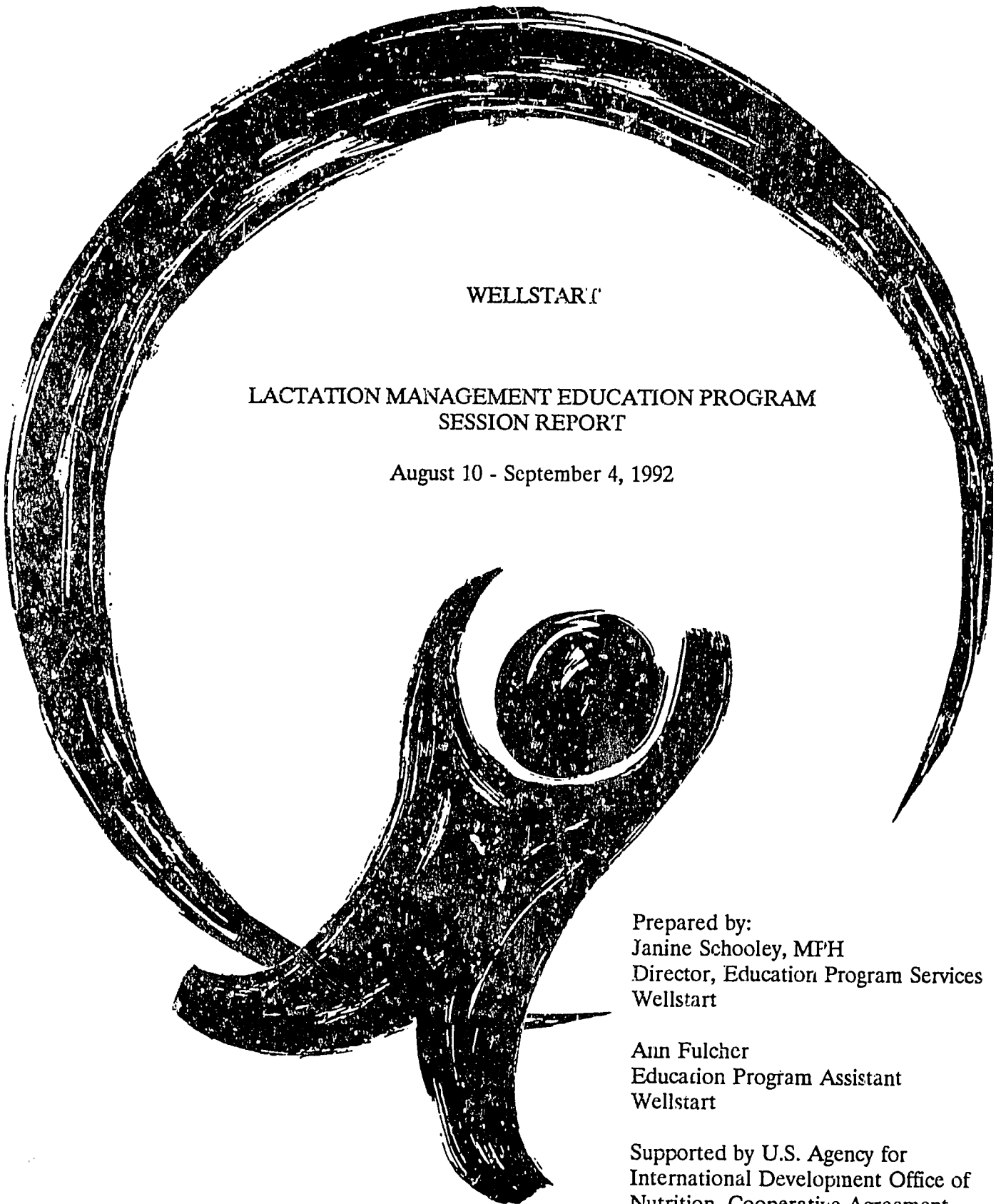

WELLSTART

LACTATION MANAGEMENT EDUCATION PROGRAM SESSION REPORT

August 10 - September 4, 1992

Prepared by:
Janine Schooley, MPH
Director, Education Program Services
Wellstart

Ann Fulcher
Education Program Assistant
Wellstart

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WELLSTART SM

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APPENDICES:

I. Introduction and Summary

A Lactation Management Education (LME) Program course was held at the Wellstart facilities in San Diego from August 10 - September 4, 1992. Fourteen multidisciplinary health professionals from four countries (Malaysia, NIS/CIS, the Philippines and Zimbabwe) attended the four-week course.

In addition, an Advanced Study Fellow, Dr. Connie de Guzman, who is an obstetrician from the Philippines, participated in course activities as part of the Fellowship experience (July 27 - September 18, 1992). She has participated in the Wellstart Program since entering the August-September, 1979, LME course. She is a faculty member at Dr. Jose Fabella Memorial Hospital in Manila, and has worked extensively with the Department of Health (DOH) on their breastfeeding training activities.

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 increased at the completion of the four-week course. (Average scores rose from 50.48% to 76.43% 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 score for usefulness was 4.68, and the mean score for quality was 4.56 (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

Two of the four countries represented in this course, the Philippines and Zimbabwe, are already participating in the LME Program. This course brings the total number of Wellstart Associates from the Philippines to 36, and the total number of Zimbabwean Associates to eight.

The team from the Philippines was selected specifically to augment the relatively small number of active Wellstart Associates at an extremely key institution: Dr. Jose Fabella Memorial Hospital. Not only has this hospital been utilized as a national training resource, but it is an institution of major reputation and influence worldwide, with delegates from as far away as Mexico City and Thailand travelling to observe and learn from their experience.

The team from Zimbabwe was also carefully selected to complement the existing Harare-based team by establishing a strong resource of expertise in another key region of the country which could be utilized by the national breastfeeding/nutrition program.

The two newcomer countries were Malaysia, represented by a team of three participants, and the NIS/CIS, which was represented by a Russian National physician and a British physician who is an international health consultant with experience and affiliations with the NIS/CIS.

Though Malaysia is not an AID-focus country, it was fortunate that the UNICEF regional office for Southeast Asia was able to identify sufficient funding to enable this important team from a major maternity facility to participate. Unfortunately, no nursing staff accompanied this team, though apparently several nurses were to attend a course on lactation management in London, England around the same time. It will be interesting to see whether these personnel can form a true functional team upon returning home, and useful to receive

feedback on the feasibility and advisability of taking this particular approach to professional training in the future.

Unfortunately, the international health consultant participant from the NIS was only able to stay for the first two weeks of the course. Though the two NIS participants did not make up a true team (this was never the intention), it was especially gratifying to establish a link that will lead to more possibilities for relationships with the former Soviet states as this area becomes more accessible to the West.

Aside from the comments above, the participant teams were appropriate in terms of multidisciplinary mix, commitment and quality. The group was composed of two nurses and three each of pediatricians, obstetricians, general physicians and nutritionists.

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.

Several additions and modifications were made to the curriculum this course, most of which were due to an increasing utilization of technical experts within Wellstart's Expanded Promotion of Breastfeeding (EPB) Program. For example, a session on Social Marketing presented by EPB's Communication and Social Marketing Advisor, was added. Additional time was provided for the Training Methodologies session. Also, an interactive session on the assessment and training aspects of the Baby Friendly Hospital Initiative was developed for this course.

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. For example, a tour of a new, free-standing birth center nearby provided an interesting comparison with the University of California, San Diego (UCSD) Medical Center facilities that always provides clinical exposure for the participants.

Three special guests participated in the final team presentations of program plans on the last day of the course. The course participants benefitted from the presence and contributions of Dr. Sham Kasim, Vice-President of the Malaysian Council for Child Welfare; Dr. Ricardo Gonzales, Medical Center Chief at Dr. Jose Fabella Memorial Hospital; and E.F. Patrice Jelliffe. Dr. Gonzales and Ms. Jelliffe were able to stay for the farewell banquet, where they continued their interchanges with course participants and LME Program faculty and staff.

In addition, two of the staff from the EPB Program in Washington, D.C. were able to participate in the entire course. Their exposure to a course in-progress contributed greatly to their understanding of breastfeeding, lactation management and the LME Program.

As always when an Advanced Study Fellow participates in a LME course, the entire group benefitted from the experiences and expertise of a Wellstart Associate 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 formal national breastfeeding programs based on accomplishments 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 benefit from these experiences. This was particularly the case during this course as the Fellow was accompanied by a full team from the same institution working on a plan for a national training center. She was thus able to provide leadership and technical assistance to her team, as well as build upon the broader ideas, enthusiasm and networks made possible through the existence of a full team.

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 and staff (from both the San Diego and Washington, D.C. offices) 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, donors 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.

The Advanced Study Fellow was, as part of her Fellowship experience, provided with an opportunity to present a synopsis of her team's plans to a group of invited guests (USAID personnel and staff of USAID-funded projects) at a meeting held in Washington, D.C. on September 15. This not only gave her additional experience at presenting her plans before an experienced and interested audience, but it gave her invaluable exposure to many key individuals and agencies working in the field of breastfeeding promotion and protection. Thus she had a chance to incorporate valuable feedback and discuss funding and collaboration possibilities prior to completion of the Fellowship. She also worked extensively with LME Program and technical and program personnel on the development of a research proposal entitled "Impact of Maternal Nutritional Risk on Weight Gain of Exclusively Breastfed Infants Among Filipino Women". (Appendix 8).

III. Recommendations for the Future

These teams 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 creates 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, for the Philippines, the Advanced Study Fellow should help to provide continuity and coordination between already participating team members and these newer additions. The Fellow should continue to play an invaluable role in ensuring the implementation of planned activities and the expansion of those activities in scope and quality.

In the case of Zimbabwe, these new Wellstart Associates will need to make a special effort to communicate with other Wellstart Associates from their country to coordinate efforts and resources. Though this may present a challenge as they are from different regions of the country, it will help to strengthen the national effort of which they are a part.

Though Malaysia is a new entry into the LME Program and thus this team does not yet have other Wellstart Associates to link up to, the team will need to coordinate closely with existing in-country resources such as their colleagues who will have just completed lactation management training in London. In addition, linkages between Malaysia, Thailand and other countries in Southeast Asia should be fostered and facilitated through a strong and dedicated regional UNICEF office. (This office was the source of funding support for this team and for a growing number of breastfeeding activities in the region).

With regard to the two NIS-related participants, it is recommended that Wellstart, both the LME and EPB Programs, draw upon these resources and linkages with this new and expanding frontier to explore and develop plans for meeting the need for education, training and institutional change in this challenging region.

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, and regional or international funding agencies such as UNICEF, will continue to 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

Course Participants

WELLSTART
Lactaction Management Education Program
August 10 - September 4, 1992

COURSE PARTICIPANTS

PHILIPPINES

Dr. Jose Fabella Memorial Hospital (JFMH)
Manila, Philippines

Advanced Study Fellow
Dr. Concolacion C. de Guzman
Medical Specialist
Obstetrics & Gynecology

Dr. Rebecca M. Ramos
Chief, Professional Medical Staff

Dr. Remedios T. David
Medical Specialist II
Training Officer - Pediatrics

Dr. Evelyn A. Lopez del Castillo
Assistant Head
Department of Pediatrics

Dr. Marieta R. Siongco
Head, Department of Obstetrics & Gynecology

Amelia P. Medina
Midwife IV

ZIMBABWE

Ministry of Health
Mutare Provincial Hospital
Mutare, Zimbabwe

Ancikaria Jane Chigumira
Dietitian

Josephine Enea Chikuse
Nurse Tutor

Lucia Mutowo
Senior Nutritionist

Dr. Callisto Tarukandirwa
Medical Officer

MALAYSIA

Public Health Institute
General Hospital
Kuala Lumpur, Malaysia

Dr. Paramjothi Ponnampalam
Consultant Obstetrician & Gynecologist

Dr. Musa Mohd. Nordin
Consultant Paediatrician/Neonatologist

Mrs. Fatimah Salim
Nutrition Officer

OTHER

Dr. Elena Stroot
Assistant, Special Advisor to Department
Chairman, Committee on Health Care
Russian Parliament

Dr. Carol A. Baume
Communications and Social Marketing Advisor
Wellstart's Expanded Promotion of
Breastfeeding (EPB) Project
Washington, DC

Dr. Susan M. Welsby
International Health Consultant

Anna Martin
Program Assistant
Wellstart's Expanded Promotion of
Breastfeeding (EPB) Project
Washington, DC

APPENDIX 2

Overview of Advanced Study Fellowship Program

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.

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FELLOWSHIP SCHEDULE
July 26 - September 19, 1992

OVERVIEW:

Week I — Activities of this week (July 27-31) will include:

1. Preparation for LME Course, August 10 - September 4 (See attached schedule):
   a. General orientation to program;
   b. Meetings with staff and faculty;
   c. Participation in clinical staff meetings, course staff meetings, housestaff rounds and clinical services;
   d. Discussion and selection of topic focus for:
      1) seminar presentation;
      2) program or project plan;
      3) reference review.
   e. Review of Course syllabus;
   f. Review of audio-visual materials;
   g. Preparation for field site visits.

Week II — Activities of this week (August 3-7) will include:

1. Field site visits:
   a. Mother's Milk Bank (8/3/92) - San Jose, CA
      M. Teresa Asquith, Director and Coordinator
   b. Denver Lactation Program, AMI/St. Luke's Hospital (8/4/92)
      Dr. Marianne Neifert, Medical Director
   c. Texas Children's Nutrition Research Center (8/5-6/92) - Houston, TX
      Dr. Richard Schanler, Associate Professor of Pediatrics
   d. Grady Maternal Hospital (8/7/92) - Atlanta, GA
      Kim Bugg, Maternal and Infant Care Project

Week III-VI — Lactation Management Education Course

Week VII — Activities of this week (September 7-11) will include:

1. Meetings with representatives of USAID and USAID-funded projects (e.g. AID, Offices of Nutrition and Health; WINS; PRITECH; MotherCare), Washington, DC;
2. Meetings with EPB staff in Wellstart, DC offices;
3. Tour and meetings with Gayle Gibbons at APHA Clearinghouse, Washington, DC;

Week VIII — Complete all assignments and projects (at Wellstart, San Diego) and prepare for departure.

FELLOWSHIP SCHEDULE

WEEK I: July 26 - 31, 1992

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
July 26	July 27	July 28	July 29	July 30	July 31
(AR) Northwest Airlines #4650 (San Francisco) 5:09 PM	(Timing flexible due to probable jet lag) Tour of Wellstart -P. Faucher	8:30 - 9:30 Administrative Orientation -P. Faucher -N. Small 9:45 - 11:45 Synthesis, Biochem, and Immun. of Human Milk -M. Hamosh	8:30 - 9:30 LME Course Orientation -P. Faucher 10:00 - 12:00 Self Study and Clinical Services	9:00 - 10:30 Self Study and Clinical Services 10:45 - 12:15 Maternal Nutrition -V. Newman	8:30 - 10:00 Model Hospital Policies -E. Creer -M. Kroeger -A. Brownlee 10:00 - 12:00 Self Study
	12:00 - 1:30 Lunch with Pat and Janine	12:30 - 1:30 Welcome Lunch with MCH, Faculty, and Staff	12:00 - 1:30 LME Course Staff Meeting	12:15 - 1:30 Lunch with MCH Participants	12:00 - 1:00 Lunch with Audrey, Ruth, and Ann B.
	Review of Documents and Settling into Office	1:00 - 2:00 Procite Orientation -M. Bovee 2:00 - 3:00 Meeting with Co-Directors -A. Naylor -R. Wester 3:15 - 4:15 Orientation to Fellowship, Projects, and Assignments -A. Brownlee -P. Faucher -J. Schooley	1:30 - 3:00 Oral Motor Dysfunction -M. McDonald 3:15 - 4:30 Discuss Project(s) with A. Brownlee	1:30 - 3:00 Discuss Project with A. Brownlee 3:15 - 5:00 Self Study and Clinical Services	1:00 - 2:00 Review of Project and Assignment Progress -A. Naylor -R. Wester -A. Brownlee 2:00 - 3:00 Meet with V. Newman 3:30 - 4:00 Field Site Visit Orientation -P. Faucher 4:00 - 5:00 Self Study and Clinical Services

APPENDIX 3

Course Schedule

WELLSTART
Lactation Management Education Program
August 10 - September 4, 1992

COURSE SCHEDULE

Week I

Monday, August 10	Tuesday, August 11	Wednesday, August 12	Thursday, August 13	Friday, August 14
8:00 - 8:30 Escort to Wellstart and Tour of Facilities 8:30 - 10:15 General Orientation to Program and Administrative Matters 10:30 - 12:30 Team Presentations	8:30 - 12:30 Breastfeeding and Child Survival -A. Naylor	8:00 - 10:15 Management of Successful Breastfeeding -R. Wester -M. Kroeger 10:30 - 11:45 Maternal Problems Impacting Successful Lactation and Breastfeeding -E. Creer -D. Ramey 12:00 - 12:30 Orientation to Program Planning Assignment -J. Schooley	8:00 - 8:30 Orientation to UCSD -L. Scott -C. Sainz 8:30 - 8:45 Orientation to Clinical Experiences -N. Powers 9:00 - 10:30 Oral-Motor Dysfunction in Infants: Assessment and Intervention -K. Bouma 10:45 - 12:30 Approach to the Management of Infant Problems Impacting Successful Lactation and Breastfeeding -R. Wester -W. Slusser	8:30 - 9:45 Hospital Rounds *(Classroom 8:15)* Ramos Salim Tarukan. Siongco Chigumira Welsby 10:00 - 1:00 Clinical Experiences/ Audiovisual Reviews *Lactation Clinic* *(Clinic House)* Ramos Salim Tarukan. Siongco Chigumira Welsby *Nutrition Counseling* *(Vicky's Office)* David Mutowo Baume *Breast Exam Review* *(Classroom)* Martin del Castillo Paramjothi Chikuse *Slide/Tape Set Review* *(Journal Room)* Medina de Guzman Nordin Stroot
12:30 - 1:30 LUNCH with faculty & staff	12:00 - 1:00 LUNCH	12:30 - 1:30 LUNCH	12:30 - 1:30 LUNCH	1:00 - 2:00 LUNCH
1:30 - 2:30 Continuation of Team Presentations 2:45 - 3:30 Overview of Wellstart -A. Naylor	1:00 - 3:00 Basic Science Foundation -A. Naylor -W. Slusser 3:15 - 4:00 Basic Science Discussion -A. Naylor -W. Slusser	1:30 - 5:30 Program Planning and Evaluation -A. Brownlee	1:30 - 3:30 Maternal Nutrition -V. Newman 3:45 - 5:00 Review of Effective Counselling in Lactation Management -W. Slusser -L. Scott -D. Ramey -C. de Guzman	2:00 - 5:00 Training the Trainers: Effective Training Techniques - I -L. Bruce -A. Martin 5:00 - 5:30 Discussion A. Naylor R. Wester

Week II

Monday, August 17	Tuesday, August 18	Wednesday, August 19	Thursday, August 20	Friday, August 21
8:00 - 9:30 Effects of Maternal Nutrition on Milk Composition and Volume -V. Newman 9:45 - 10:45 Growth Patterns of Breastfed Infants -N. Powers 11:00 - 12:30 Slow Gain/Insufficient Milk Syndrome -N. Powers	8:30 - 9:45 Hospital Rounds *(Classroom 8:15)* David Mutowo Baume Stroot Welsby 10:00 - 1:00 Clinical Experiences/ Audiovisual Reviews *Lactation Clinic (Clinic House)* David Mutowo Baume del Castillo Paramjothi Chikuse *Nutrition Counseling (Vicky's Office)* Ramos Salim Welsby *Breast Exam Review (Classroom)* Tarukan. Siongco Chigumira *Video Tape Review (Library)* Medina Nordin de Guzman Stroot Martin	8:00 - 9:30 Women, Work, and Breastfeeding -C. O'Gara 9:45 - 11:15 Mothers' Support Groups -J. Canahuati 11:30 - 12:45 Management of Maternal/Infant Separation -L. Scott	8:00 - 9:15 Infant Nutrition and Weaning -V. Newman 9:30 - 11:30 Suitability of Human Milk for the Preterm Infant -R. Schanler 11:30 - 12:00 Film: "*Feeding Low Birth Weight Babies*"	8:00 - 9:30 Diarrheal Disease Control and Breastfeeding -W. Slusser 9:45 - 11:15 The Effect of Continuous Social Support During Labor on Perinatal Morbidity -M. Klaus 11:30 - 12:00 Film: "*Amazing Newborn*"
12:30 - 1:30 LUNCH	1:00 - 2:00 LUNCH	12:45 - 1:45 LUNCH	12:00 - 1:00 LUNCH	12:00 - 12:15 BREAK
1:30 - 5:30 Training the Trainers: Effective Training Techniques - II -L. Bruce -A. Martin	2:00 - 5:45 Program Planning Workshops I -A. Brownlee -E. Creer -C. de Guzman	1:45 - 4:45 Clinical Experiences/ Audiovisual Reviews *Lactation Clinic (Clinic House)* Medina Nordin de Guzman Stroot Martin *Nutrition Counseling (Vicky's Office)* Tarukan. Siongco Chigumira *Breast Exam Review (Classroom)* Ramos Salim David Mutowo Baume *Slide/Tape Set Review (Journal Room)* del Castillo Paramjothi Chikuse Welsby	1:00 - 2:15 The Kangaroo Care Method: Application and Use -R. Figueroa 2:30 - 3:45 Safety and Therapeutic Aspects of Kangaroo Care for Preterm Infants -S. Ludington 4:00 - 5:15 The Preterm Infant: Neuromotor and Physiological Factors Related to Breastfeeding -K. Bouma	12:15 - 2:30 Discussion of Cultural Traditions and Beliefs Related to Infant Feeding *(Lunch Provided)* -A. Wright -A. Brownlee 2:45 - 4:15 Psychosocial and Cultural Aspects of Infancy: Implications for Breastfeeding -S. Dixon 4:30 - 5:00 Discussion -A. Naylor -R. Wester -V. Newman

Week III

Monday, August 24	Tuesday, August 25	Wednesday, August 26	Thursday, August 27	Friday, August 28
8:00 - 9:15 Programs to Promote and Protect Breastfeeding -A. Naylor 9:30 - 10:30 Breast Health -M. Kroeger 10:45 - 11:45 The Role of Nutrition in Breast Health -V. Newman	8:00 - 12:00 Program Planning Workshop II -A. Brownlee -E. Creer -C. de Guzman	8:30 - 9:45 Hospital Rounds *(Classroom 8:15)* del Castillo Paramjothi Chikuse Medina Nordin de Guzman 10:00 - 1:00 Clinical Experiences/ Audiovisual Reviews *Lactation Clinic* *(Clinic House)* Ramos Salim Tarukan. David Mutowo *Nutrition Counseling* *(Vicky's Office)* del Castillo Paramjothi Chikuse *Breast Exam Review* *(Classroom)* Medina Nordin de Guzman Stroot Welsby *Slide/Tape Set Review* *(Journal Room)* Siongco Chigumira Martin Baume	8:30 - 9:15 Orientation to Standardized Patients -E. Creer -J. Schooley 9:30 - 12:30 Clinical Experiences/ Audiovisual Reviews *Lactation Clinic* *(Clinic House)* Baume Siongco Chigumira Martin Stroot Welsby *Nutrition Counseling* *(Vicky's Office)* Medina Nordin de Guzman *Slide/Tape Set Review* *(Journal Room)* Ramos Salim Tarukan. David Mutowo *Video Tape Review* *(Library)* del Castillo Paramjothi Chikuse	7:00 - 11:00 Comparative Lactation Field Trip to the San Diego Wild Animal Park -L. Killmar -A. Naylor -A. Fulcher -D. Ramey (Backup) 11:00 - Intercultural Orientation -Faculty and Staff
11:45 - 12:45 LUNCH	12:00 - 12:30 LUNCH	1:00 - 2:00 LUNCH	12:30 - 1:30 LUNCH	
12:45 - 1:45 Training of Traditional Birth Attendants (TBA's) and Other Primary Health Care Workers -M. Kroeger 2:00 - 5:00 Implementing the Ten Steps: Needs Assessment and Training -E. Creer -A. Brownlee -M. Kroeger -C. de Guzman	12:30 - 5:30 Field Trip to ISSSTECALI Tijuana, Mexico -C. Collins -A. Brownlee -J. Schooley	2:00 - 3:45 Induced and Relactation -E. Jones -N. Powers 4:00 - 5:00 The Infant with Cleft Lip and/or Palate -E. Jones	1:30 - 3:30 Breastfeeding, Fertility and Child Spacing -M. Labbok 3:45 - 4:15 Orientation to Field Trip and Miscellaneous Administrative Matters -P. Faucher 5:00 - 7:00 Comparative Lactation -A. Naylor	**Fiesta Saturday** **4:30 - 9:00**

Week IV

Monday, August 31	Tuesday, September 1	Wednesday, September 2	Thursday, September 3	Friday, September 4
8:30 - 9:45 Oral-Motor Rounds *(Classroom 8:15)* Ramos Salim Tarukan Paramjothi Chikuse 10:00 - 11:30 HIV and Breastfeeding -A. Ruff 11:45 - 12:45 Lactation Management in Medical Programs -N. Powers -E. Creer -V. Newman	8:30 - 9:45 Oral-Motor Rounds *(Classroom 8:15)* Medina de Guzman Nordin Stroot del Castillo 10:00 - 1:00 Clinical Experiences *Lactation Clinic* *(Clinic House)* del Castillo Paramjothi Chikuse Medina Nordin de Guzman *Nutrition Counseling* *(Vicky's Office)* Martin Stroot *Video Tape Review* *(Classroom)* David Mutowo Baume Ramos Salim Tarukan. Siongco Chigumira	8:00 - 9:30 Drugs and Contaminants -P. Anderson 9:45 - 10:45 Jaundice and Breastfeeding -N. Powers 11:00 - 12:30 Social Marketing -C. Baume	8:30 - 9:45 Oral-Motor Rounds *(Classroom 8:15)* Siongco Chigumira Martin David Mutowo Baume 10:00 - 11:45 Consultant's Report Seminar (Review of 20 Questions Assignment) -A. Naylor -E. Creer -V. Newman -C. de Guzman 12:00 - 1:30 Formula Marketing and the WHO Code -J. Schooley	9:00 - 12:00 Team Program Plan Presentations -Faculty 12:00 - 12:30 Film: "*Breastfeeding: Protecting a Natural Resource*"
12:45 - 1:45 LUNCH	1:00 - 2:00 LUNCH	12:30 - 1:30 LUNCH	1:30 - 2:30 LUNCH	12:30 - 1:30 LUNCH
1:45 - 4:45 *Standardized Patients* *Standardized Patients* *(Classroom)* Stroot David Mutowo Siongco Baume Ramos Salim Tarukan. *Independent Study* del Castillo Paramjothi Chikuse Medina Nordin de Guzman Chigumira Martin 5:30 - 8:30 Teaching Resources Review and Selection Philippines/Stroot	2:00 - 3:15 Growth Monitoring Programs -V. Newman 3:30 - 5:00 Contraindication and Controversies -A. Naylor -W. Slusser 5:30 - 8:30 Teaching Resources Review and Selection Malaysia/Zimbabwe	1:30 - 3:15 Professional Roles and Responsibilities on the Multidisciplinary Team -V. Newman -D. Ramey -A. Naylor/W. Slusser -C. de Guzman 3:30 - 5:00 Case Management Review Session -L. Scott -D. Ramey -C. de Guzman	2:30 - 5:30 Standardized Patients *Standardized Patients* *(Classroom)* del Castillo Paramjothi Chikuse Medina Nordin Martin de Guzman Chigumira *Independent Study* Ramos Salim Tarukan. Siongco David Mutowo Baume Stroot	1:30 - 4:00 Administrative Matters 7:00 - 10:00 Closing Ceremonies and Farewell Banquet (Catamaran Resort Hotel)

APPENDIX 4

Faculty and Staff

WELLSTART
Lactation Management Education Program
August 10 - September 4, 1992

FACULTY AND STAFF

WELLSTART CORE FACULTY

Ann Brownlee, PhD
Field Services/Evaluation Coordinator

Elizabeth Creer, FNP, MPH
Family Nurse Practitioner

Mary Kroeger, RN, CNM, MPH
Nurse-Midwife

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

Vicky Newman, RD, MS
Perinatal Nutritionist

Nancy Powers, MD, FAAP
Director, Professional Services

Destry Ramy, CPNP
Pediatric Nurse Practioner

Wendelin Slusser, MD, MS
Pediatrician

Lois Scott, RN
Lactation Specialist and Clinic Manager

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

ADJUNCT FACULTY

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

Carol Baume, PhD
Communication and Social Marketing Advisor
Expanded Promotion of
Breastfeeding (EPB) Project
Wellstart
Washington, DC

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

Linda Bruce, MA, RD
Training Advisor,
Expanded Promotion of
Breastfeeding (EPB) Project
Wellstart
Washington, DC

Gabriel Chong, MD
Director
Hospital ISSSTECALI
Tijuana, Mexico

Suzanne D. Dixon, MD
Professor of Pediatrics
UCSD Medical Center
San Diego, California

Rolando Figueroa de Leon, MD
Chief of Neonatology and the Neonatal
Intensive Care Unit
Guatemalan Institute of Social Security
Guatemala City, Guatemala

E. F. Patrice Jelliffe, MPH
Population and Family Health Division
University of California, Los Angeles
School of Public Health
Los Angeles, California

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

Lawrence E. Killmar
Curator of Mammals
San Diego Wild Animal Park
Escondido, California

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

Miriam Labbok, MD, MPH
Associate Professor
Department of Obstetrics & Gynecology
Director, Breastfeeding and Maternal Child Health
Georgetown University Medical Center
Washington, DC

Susan Ludington, CNM, PhD
Associate Professor, Maternal/Child Health
University of California, Los Angeles
School of Nursing
Los Angeles, California

Anna Martin, MA
Program Assistant
Expanded Promotion of Breastfeeding (EPB) Project
Wellstart
Washington, DC

Chloe O'Gara, EdD
Director
Expanded Promotion of Breastfeeding (EPB) Project
Wellstart
Washington, DC

Andrea J. Ruff, MD
Assistant Professor
Departments of International Health and Pediatrics
Johns Hopkins University
Baltimore, Maryland

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

Judy Weiner de Canahuati, BA
Outreach Advisor
Expanded Promotion of Breastfeeding (EPB) Project
Wellstart
Washington, DC

Ann Wright, PhD
Research Assistant Professor
Department of Pediatrics
College of Medicine
University of Arizona
Tucson, Arizona

ADMINISTRATIVE STAFF

Cynthia Collins
Staff Assistant

Lisa Daigle
Director, Financial Services

Sara Fasolino
Receptionist

Patricia Faucher, MPH
Education Services Coordinator

Kathleen Finn, MA
Director, Administrative Services

Ann Fulcher
Education Program Assistant

Patricia Gage, MA, RD
Staff Assistant

Leslie Gallaway
Word Processor

Carol Guenther
Senior Word Processor

Ingrid Gulve
MCH Project Secretary

Monica King
Education Materials Coordinator

Lynn Nelson
Staff Accountant

Janine Schooley, MPH
Director, Education Program Services

Nancy Small
Senior Accountant

Marlene Turpin
Medical Biller

Gail Ugarte, RD, MPH
MCH Project Coordinator

Elena VanderWiel
Executive Secretary

Susan Walker
Facilities Services Coordinator

TRANSLATORS

Rachel Cave

Sandra Lee

Judy McLean

Terry Oliva

APPENDIX 5

Pre- and Post-Test Summary

WELLSTART
Lactation Management Education Program
August 10 - September 4, 1992

PRE- AND POST-TEST SUMMARY

Team	Disc.	Name	Pre-Test			Post-Test			% Improvement Between Pre- and Post-Test
			# Incorrect	# Correct	% Correct	# Incorrect	# Correct	# Correct	
JFMH	Ped	Evelyn A. Lopez del Castillo	14	16	53.33	6	24	80.00	26.67
Mut	Nutr	Ancikaria Jane Chigumira	21	9	30.00	15	15	50.00	20.00
Mut	N	Josephine E. Chikuse	21	9	30.00	11	19	63.33	33.33
JFMH	Ped	Remedios T. David	12	18	60.00	3	27	90.00	30.00
JFMH	Ob	Consolacion C. de Guzman*	13	17	56.67	5	25	83.33	26.66
JFMH	N	Amelia P. Medina	15	15	50.00	10	20	66.67	16.67
KL	Ped	Musa Mohd. Nordin	9	21	70.00	3	27	90.00	20.00
Mut	Nutr	Lucio Mutowo	16	14	46.67	3	27	90.00	43.33
KL	Ob	Paramjothi Ponnampalam	15	15	50.00	8	22	73.33	23.33
JFMH	Ob	Rebecca Ramos	9	21	70.00	4	26	86.67	16.67
KL	Nutr	Fatimah Salim	11	19	63.33	5	25	83.33	20.00
JFMH	Ob	Marieta R. Siongco	12	18	60.00	8	22	73.33	13.33
Russ	OthP	Elena Stroot	26	4	13.33	14	16	53.33	40.00
Mut	OthP	Callisto Tarukandirwa	18	12	40.00	7	23	76.67	36.67
Russ	OthP	Susan M. Welsby	9	21	70.00	2	28	93.33	23.33
			14.86	15.14	50.48	7.07	22.93	76.43	25.95

*Scores not included in averages

JFMH: Dr. Jose Fabella Memorial Hospital, Manila, Philippines
KL: Public Health Institute, General Hospital, Kuala Lumpur, Malaysia
Mut: Ministry of Health, Mutare Provincial Hospital, Mutare, Zimbabwe
Russ: Russian Parliament

N = Nurse, Midwife, or Nurse-Midwife (2)
Nutr = Nutritionist or Dietitian (3)
Ped = Pediatrician or Neonatologist (3)
OthP = Other Physician (3)
Ob = Obstetrician or Obstetrician-Gynecologist (4)

Comparison of Scores (% Correct) by Team and Discipline

Team → / ↓ Disc	Pre-Test					Post-Test					% Improvement Between Pre- and Post-Test				
	JFMH	KL	Mut	Russ	Disc. Avg.	JFMH	KL	Mut	Russ	Disc. Avg.	JFMH	KL	Mut	Russ	Disc. Avg.
Nurse (2)	50		30		40.0	67		63		65.0	17		33		25.0
Nutritionist (3)		63	30 47		46.7		83	50 90		74.3		20	20 43		27.7
Pediatrician (3)	53 60	70			61.0	80 90	90			86.7	27 30	20			25.7
Obstetrician (3)	60 57* 70	50			60.0	73 83* 87	73			77.7	13 27* 17	23			17.7
Oth. Physician (3)			40	13 70	41.0			77	53 93	74.3			37	40 23	3..3
Total Physician Average by Team	46.8	25.0	40.0	41.5		60.8	36.5	77.0	73.0		14.3	11.5	37.0	31.5	
Total Team Average	60.0	40.0	21.8	41.5		82.6	54.3	41.8	73.0		22.8	14.3	20.0	31.5	

APPENDIX 6

Summary of Overall Course Evaluation

WELLSTART
Lactation Management Education Program
August 10 - September 4, 1992

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 fifteen evaluations were completed on the final day of the course with the following breakdown of disciplines indicated: three nutritionists or dietitians; two nurses or nurse-midwives; three pediatricians or neonatologists; four obstetricians; and three other physicians.

	Nutr (3)	Nurs (2)	Ped (3)	Ob (4)	Oth Phys (3)	Physician (10)		Group (15)	
						Avg	Tot	Avg	Tot
VIDEOTAPES SHOWN DURING COURSE/SEMINARS									
"Amazing Newborn"									
Usefulness[1]	4.3	4.0	4.7	4.0	4.3	4.3		4.3	
"Breastfeeding — Protecting a Natural Resource"									
Usefulness[1]	4.7	4.5	4.0	4.8	3.5	4.2		4.4	
"Feeding Low Birth Weight Babies"									
Usefulness[1]	4.7	5.0	4.0	4.5	4.3	4.3		4.5	
NON-DIDACTIC ACTIVITIES									
Orientation to Program Planning Assignment									
Usefulness[1]	5.0	5.0	4.3	4.3	4.3	4.3		4.5	
Program Planning Workshops									
Usefulness[1]	5.0	5.0	4.7	4.0	4.7	4.4		4.6	
# of sessions: not enough	1			1			1		2
just right	1	2	3	2	3		8		11
too many							0		0
not answered	1			1			1		2
Orientation to Clinical Experiences									
Usefulness[1]	4.3	4.0	5.0	4.5	4.3	4.6		4.5	

	Nutr (3)	Nurs (2)	Ped (3)	Ob (4)	Oth Phys (3)	Physician (10)		Group (15)	
						Avg	Tot	Avg	Tot
Hospital Rounds									
Usefulness[1]	5.0	4.5	4.7	4.5	5.0	4.7		4.7	
# of sessions: not enough	1		1		1		2		3
just right	1	2	2	3	2		7		10
too many							0		0
not answered	1			1			1		2
# of patients: not enough	2		1	2	1		4		6
just right	1	1		1	1		2		4
too many		1					0		1
not answered			2	1	1		4		4
Oral-Motor Assessment Rounds									
Usefulness[1]	4.7	4.0	4.3	4.8	4.0	4.4		4.4	
# of sessions: not enough	1		1	1	1		3		4
just right	1	2	1	3	1		5		8
too many							0		0
not answered	1		1		1		2		3
# of patients: not enough	2		1	1	1		3		5
just right	1	2	1	3	1		5		8
too many							0		0
not answered			1		1		2		2
Lactation Clinic									
Usefulness[1]	4.7	5.0	5.0	4.5	4.3	4.6		4.7	
# of sessions: not enough				1			1		1
just right	2	2	2	3	2		7		11
too many							0		0
not answered	1		1		1		2		3
# of patients: not enough	2						0		2
just right	1	2	2	4	1		7		10
too many							0		0
not answered			1		2		3		3
Orientation to Standardized Patients									
Usefulness[1]	4.7	5.0	4.0	4.3	4.0	4.1		4.3	

	Nutr (3)	Nurs (2)	Ped (3)	Ob (4)	Oth Phys (3)	Physician (10)		Group (15)	
						Avg	Tot	Avg	Tot
Standardized Patients									
Usefulness[1]	4.3	5.0	4.3	4.3	3.5	4.1		4.3	
# of sessions: not enough				1			1		1
just right	2	2	3	3	2		8		12
too many							0		0
not answered	1				1		1		2
# of patients: not enough				1	1		2		2
just right	2	2	2	3	1		6		10
too many							0		0
not answered	1		1		1		2		3
Nutrition Counseling									
Usefulness[1]	5.0	5.0	4.7	4.3	3.7	4.2		4.5	
# of sessions: not enough							0		0
just right	3	2	2	3	2		7		12
too many					1		1		1
not answered			1	1			2		2
# of patients: not enough							0		0
just right	3	2	2	2	3		7		12
too many							0		0
not answered			1	2			3		3
Breast Exam Review									
Usefulness[1]	4.7	5.0	4.3	5.0	4.7	4.7		4.7	
Video Tape Review									
Usefulness[1]	4.3	4.0	4.7	4.5	3.0	4.2		4.2	
Slide Set Review									
Usefulness[1]	4.7	4.0	2.0	4.8	3.0	3.4		3.7	
Field Trip to San Diego Wild Animal Park									
Usefulness[1]	4.7	4.0	5.0	4.8	4.0	4.7		4.6	
Field Trip to ISSSTECALI Hospital, Tijuana, Mexico									
Usefulness[1]	—	—	—	—	—	—		4.1	
MATERIALS PROVIDED Course Syllabus									
Ease of reading[2]	5.0	4.5	4.7	5.0	5.0	4.9		4.9	
Helpfulness[3]	5.0	4.5	4.5	5.0	5.0	4.9		4.9	

	Nutr (3)	Nurs (2)	Ped (3)	Ob (4)	Oth Phys (3)	Physician (10)		Group (15)	
						Avg	Tot	Avg	Tot
Course Textbooks									
Usefulness[1]	5.0	5.0	5.0	5.0	4.7	4.9		4.9	
Collective set was: not enough	2			1	1		2		4
just right	1	2	3	2	2		7		10
too many				1			1		1
did not read							0		0
not answered							0		0
Use in future: yes	3	2	3	4	2		9		14
no							0		0
not answered					1		1		1
Team Reprint Collection									
Collective set was: not enough							0		0
just right	3	2	3	1	3		7		12
too many				1			1		1
did not read							0		0
not answered				2			2		2
Usefulness[1]	5.0	5.0	5.0	5.0	4.5	4.9		4.9	
Use in future: yes	3	2	2	4	3		9		14
no							0		0
not answered			1				1		1
MISCELLANEOUS IMPORTANT MATTERS The English Language									
Understandability[4](seminars)	5.0	5.0	5.0	4.5	4.7	4.7		4.8	
Ease of reading[2]	5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Ease of Speaking[5]	5.0	5.0	4.3	5.0	4.7	4.7		4.8	

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	Nutr (3)	Nurs (2)	Ped (3)	Ob (4)	Oth Phys (3)	Physician (10)		Group (15)	
						Avg	Tot	Avg	Tot
Hotel Accommodations									
Adequacy[6]	5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Mail service: adequate	3	2	3	4	3		10		15
not adequate							0		0
not answered							0		0
Telephone: adequate	3	2	2	4	3		9		14
not adequate			1				1		1
not answered							0		0
Hotel van: adequate	3	2	3	4	3		10		15
not adequate							0		0
not answered							0		0
Use in future? yes	3	2	3	4	3		10		15
no							0		0
not answered							0		0
OVERALL EVALUATION Usefulness of providing this program to multidisciplinary teams[1]	5.0	5.0	5.0	4.8	5.0	4.9		4.9	
Increase in knowledge[7]	5.0	5.0	5.0	4.8	5.0	4.9		4.9	
Recommend this program be provided for other health professionals from developing nations yes	3	2	3	4	3		10		15
no							0		0
not answered							0		0
General Rating: excellent	2	1	3	4	2		9		12
very good					1		1		1
good	1						0		1
fair							0		0
poor							0		0
not answered		1					0		1

APPENDIX 7

Team Program Plans

Training Program for the Promotion, Protection and Support of Breastfeeding in Malaysia

Dr. Paramjothi P.
Dr. Musa Mohd Nordin
Puan Fatimah Salim

Presented September 4, 1992

Developed in cooperation with Wellstart as part of the Lactation Management Education Program funded by USAID's Office of Nutrition, DAN-5117-A-00-9099-00

1. Introduction

Breastfeeding is vital for child survival. Breastfeeding reduces infant morbidity and saves infant lives. It has a unique biological and emotional influence on the health of both mother and child and the anti-infective properties of breastmilk help to protect infants against disease. In addition, there is an important relation between breastfeeding and child spacing.

For these reasons, professional and health workers serving in health care facilities should make an effort to protect, promote and support exclusive breastfeeding, and to provide expectant and new mothers with accurate and timely information, and adequate support and encouragement.

2. Situation Analysis

2.1 Background on Malaysia

Malaysia is a rapidly developing country covering an area of about 330,307 sq. km, occupying Peninsular Malaysia and the states of Sabah and Sarawak in the north-western coastal area of Borneo Island.

It consists of a multi-racial, multi-cultural, multi-religious and multi-lingual population. The estimated population of Malaysia in 1990 was 17.9 million. It has a population density of 48 persons per sq. km. with an annual population growth rate of 2.5% in 1987. In 1985 about 62.6% of the population of Malaysia resided in rural areas and 37.4% in the urban areas.

Up to the end of 1986, the age structure of the population still depicted a situation dominated by youths. Infants and toddlers comprised 40% of the total population, children 5-14 years old constituted another 23% and the entire population of under 20 made up 48% of the total population. The life expectancy at birth was 68.2% years for males and 72.6 years for females.

In 1987, Malaysia had a total labour force of 6.3 million where 5.7 million were employed and 0.6 million were unemployed thus giving rise to an unemployment rate of 9.5%. A major part of the employment was in sectors of agriculture, forestry and fishing.

The literacy rate, in 1990, amongst the population of 10 years and above was 80% for males and 64% for females. Thirty one percent (31%) of the population has secondary education.

The mean monthly gross household income for 1984 was M$494 with a gross income of M$695 in the urban areas and M$371 in the rural areas. The per capita GNP in 1988 was M$4256.

The health services programme in the country is under the responsibility of the Ministry of Health. Its objective being to facilitate the attainment of health which will enable one to lead an economically and socially productive life. The Ministry of Health provides a comprehensive range of health programmes which can be grouped into preventive, curative and supportive services.

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Its preventive services include family health, environmental sanitation, communicable diseases control, vector-borne diseases control, food quality control, tuberculosis control, leprosy control, occupational health, preventative dental care and health education. The services specially geared to care for the needs of mothers and children is the family health services, in which nutrition related activities is a component.

2.2 Status of Breastfeeding in Malaysia

2.2.1 Incidence of Breastfeeding

2.2.1.1 At birth

From the National Nutritional Surveillance System implemented from 1983 to 1986, mothers who delivered their babies in the government and private hospitals and maternity homes were interviewed to find out whether they breastfed their babies at birth. The data obtained are tabulated below.

Table 1

	1983	1986
No. of babies delivered	381,118	394,841
No. of babies breastfed	335,384	371,151
Percentage of babies breastfed %	88	94

Source: National Nutrition Surveillance System 1983/86.

In 1983, 88% of babies delivered were breastfed compared to 94% in 1986. As seen from Table 2, there is an improvement in the status of breastfeeding among the newborns. This data is however rather misleading because it includes all babies who **ever** received breast milk and does not indicate exclusiveness of breast milk.

2.2.1.2 At three, six and twelve months

Based on the 1986 National Nutritional Surveillance data, 65% of mothers breastfed at 3 months, 62% at 6 months and 57% at 12 months. As can be seen, there is a declining incidence of breastfeeding as the infant gets older. This study only represented the breastfeeding practice in **rural** areas and the prevalence of breastfeeding would be expected to be much **lower** if urban and suburban populations were studied.

Recent data from studies in Maternity Hospital K.L. concluded in 1992 showed that only 5% of mothers were breastfeeding at six months.

2.2.2 Mean duration of breastfeeding

In the Malaysian Population Family Survey conducted in 1984/85, covering some 4100 ever married women, a small section had been devoted to questions on breastfeeding. It was found that the overall mean duration of breastfeeding was almost 6 months as seen in Table 2. In terms of ethnic groups, Malays breastfeed for considerably longer duration of time than either Indian or Chinese women. This ethnic differential increases with age of the mother since the length of time spent breastfeeding by older Malay women increases substantially. However, among the Chinese the length of time spent breastfeeding does not vary by age of mother. Table 2 also shows that there are sharp differentials in length of time spend on breastfeeding according to place of residence, education and pattern of work.

Table 2. Mean length of time (months) spent breastfeeding by currently married women and socioeconomic characteristics

Socioeconomic characteristics	Ethnic group			Age group		
	All	Malays	Non-Malays	<25	25-34	35+
Place of residence						
Urban	3.9	5.9	1.9	3.8	3.5	5.4
Rural	7.2	8.6	3.1	4.8	7.3	9.4
Ethnic group						
Malays	7.8			5.7	7.7	9.8
Chinese	1.8			1.5	1.6	
Indians	3.6				3.9	
All ethnic groups	5.9	7.8	2.5	4.5	5.7	8.1
Education (years)						
No schooling	8.8	11.2	3.2		8.1	10.1
1-6 years	6.8	9.6	2.6	3.9	6.8	8.9
7.12 years	4.8	5.8	2.2	4.6	4.9	
>12 years	2.9	3.8			2.4	
Pattern of work						
Ever worked	5.5	7.5	2.3	3.9	3.2	8.0
Never worked	8.0	8.6		6.5	8.5	8.5

Source: 1984/85 Malaysian Population and Family Survey

2.2.3 Pre-disposing factors to breastfeeding practices

A study by Soh (1984) showed that:

- A large proportion of urban mothers (25.0%) are unaware of the advantages of breastfeeding.
- A large proportion of both urban and rural mothers (56.0% and 85.0% respectively) are unaware of the benefits of colostrum.
- Most mothers, both urban and rural (79.0%) are unaware of the hazard/disadvantages of bottle feeding.
- A large proportion of urban and rural mothers (46.0% and 34.0% respectively) are not knowledgeable of the ways or techniques to increase milk production.
- A large proportion of urban and rural mothers (71.0% and 82.0% respectively) are unaware of the importance of early initiation of lactation.
- Most mothers, both urban and rural (54.0% and 51.0% respectively) are unaware that breast milk is sufficient to meet the baby's growing needs or requirements until 6 months of age.
- Thirty-one percent (31.0%) of urban and 37.0% of rural mothers consider breastfeeding inconvenient and troublesome.
- A very high percentage or urban mothers (34.0%), especially the Chinese, feel that breastfeeding spoils the mother's figure.
- A large proportion of both urban and rural mothers (46.0% and 39.0% respectively) feel that there is not much difference between breast milk and infant formula.

2.2.4 The attitudes to and practices of breastfeeding among health professionals will inevitably affect their work. A study on infant feeding practices among nursing personnel in Malaysia in 1980 found that although 75% of these mothers breastfed their babies at birth, only 19% did so at two months and 5% at six months. The percentage of six months was one of the worst on record. This survey is mentioned because it has been argued that health professionals should be setting an example on such important matters as choosing to breastfeed and the duration of breastfeeding.

3.0 Statement of Problem

In spite of the moderately high incidence of breastfeeding, **exclusive** breastfeeding with all its universal benefits is still low and the incidence is especially low among the Chinese. The recent years has witnessed an even further decline in breastfeeding among our Malaysian mothers.

A comprehensive national breastfeeding programme is lacking and there is a paucity of good and reliable database on breastfeeding in Malaysia.

While some hospital polices have changed and rooming-in is now a policy in all government hospitals, early initiation of breastfeeding is still negatively affected by factors such as poor advocacy for breastfeeding; staff inadequately trained in the promotion and support for breastfeeding and ward routines which interfere with it.

The Ministry of Health has undertaken a few measures to further enhance the promotion of breastfeeding. Five general hospitals have been selected to be role model hospitals to

implement the "Baby Friendly Hospital Initiative" where the *Ten Steps to Successful Breastfeeding* would be totally practiced.

Two national workshops were held in 1992, primarily to create awareness and update the knowledge of health professionals especially hospital staff on the importance of breastfeeding.

As a follow up, two national teams were identified and sent for training in Lactation Management. One team consisted of a hospital administrator, a health matron, and a nursing tutor, were sent to the Institute of Child Health, London in July, 1992. The second team consisting of an obstetrician, paediatrician and nutritionist were sent to the Wellstart Lactation Management Program in San Diego in August 1992. These two teams are expected to carry out intensive Lactation Management Echo Training for the health professionals to enable them to realize the "Baby Friendly Hospital" concept in all government hospitals in Malaysia.

In May 1992, our Prime Minister Dato' Seri Dr. Mahathir Mohamad signed and endorsed Malaysia's commitment to the "Declaration for the Protection, Development and Survival of Children in the 1990s," and breastfeeding is a major thrust of this declaration.

4.0 Justification

Given the above situation and statement of problem it is strongly believed that the need to educate, motivate and train health professionals in breastfeeding management is of utmost importance.

5.0 Goals, Aims and Objectives

5.1 Program Goal

To improve the status, incidence and duration of exclusive breastfeeding in Malaysia.

5.2 General Objectives

5.2.1 To train state core trainers on lactation management who will in turn provide courses and training to other health professionals associated with MCH services (hospital and health) in the different states in the country.

5.2.2 To increase awareness among Ministry of Health Officials and hospital administrators about the importance of breastfeeding.

5.2.3 To establish a lactation information resource centre at the Public Health Institute.

5.2.4 To improve and strengthen the breastfeeding component in the nursing, medical, and school curricula.

5.2.5 To monitor assess and evaluate the progress of the "Baby Friendly" hospitals.

5.2.6 To establish a database and conduct research related to breastfeeding.

5.3 Specific Objectives

5.3.1 To orientate and sensitize related health professionals in all 13 state general hospitals about the importance of breastfeeding and the "Baby Friendly Hospital" Initiative by the end of 1993.

5.3.2 By the end of the training program period (2 years) the National Lactation Training Team will have provided training in lactation management to 100 health professionals (trainers). It is expected that these state trainers will in turn conduct courses and training to all health professionals associated with MCH services (hospital and health) in the different states of the country by the end of 1997.

5.3.3 By the end of 1993, all five role model hospitals will successfully implement the "Baby Friendly Hospital" concept.

5.3.4 All 13 General Hospitals in the country will be "Baby Friendly" by the end of 1995.

6.0 Program Strategies and Activities

6.1 Conduct Lactation Management Training for State Trainers

6.1.1 The two National Lactation Management Training Team will consolidate and develop a curriculum for a five days operational level training course within three months. The coordinator and secretariat is the Public Health Institute which is the training arm of the Ministry of Health. The maternity Hospital in Kuala Lumpur has been identified as the Training Centre.

6.1.2 Within the first year (1993) two training courses will be conducted to train the five state teams from five role model hospitals. They will in turn conduct training courses for their staff. The five hospitals have been selected because they represent the Regional Referral Centre for the five regions in Malaysia. The five role model hospitals are 1) Kuala Lumpur General Hospital, 2) Ipoh General Hospital, 3) Kota Baru General Hospital, 4) Johor Baru General Hospital, 5) P. Pinang General Hospital. The State Trainers include: 1) Obstetrician, 2) Paediatrician, 3) Nutritionist, 4) Senior Nursing Sister-Obstetrics, 5) Senior Nursing Sister-Paediatrics, 6) Senior Administrative Officer.

The training program will include scientific facts concerning breastfeeding, practical aspect of breastfeeding management and clinical situations. It will also focus on improving teaching skills and program planning and evaluation.

6.1.3 Each hospital will conduct baseline studies related to breastfeeding practice in their respective hospitals and complete a standard hospital profile format prepared by the Lactation Management Training Centre.

6.1.4 Study visit to Dr. Jose Fabella Memorial Hospital in the Philippines (see Appendix 2)

6.1.5 Orientation of senior health and medical staff and policy makers of all general hospitals.

6.1.6 By the end of 1994, the other eight state teams will be trained (two trainings a year) and similar echo training courses will be conducted for their staff.

6.2 Implementation of the "Baby Friendly Hospital" concept

6.2.1 During the State Trainers Course, each team will be expected to develop their own operational plan to implement "Baby Friendly Hospital" concept. Implementation of the plan is expected within six months after the training. Initially the five role-model hospitals are expected to implement the "Baby Friendly Hospital" concept and through their experiences, the concept will then be implemented throughout the country. It is expected by the end of 1998, all government hospitals will be "Baby Friendly."

6.3 Establish a Lactation Information Resource Centre

6.3.1 The Public Health Institute will be developed as a lactation information resource centre within the first year of the training program. It has a well established library which will be continuously updated with the latest information on breastfeeding. This centre will provide support for the National Team and state team trainers in terms of references and other learning material. This can be achieved through the technical assistance of Wellstart, IBFAN and other agencies. Reprints will be sent to the state trainers on a quarterly basis. The resource centre will also provide some basic education support material.

6.4 Curriculum Integration

6.4.1 A 2-day national workshop on the integration of lactation management into the nursing medical and school curriculum will be held in 1994.

6.5 Monitoring of the "Baby Friendly Hospitals"

6.5.1 A monitoring committee will be set up consisting of Ministry of Health Officials and the National Lactation Training team. This committee will develop a monitoring system within the first year of the program. Monitoring indicators and frequency of monitoring will have to be decided upon.

6.6 Evaluation of the Breastfeeding Status in the Country by the end of 1995

A detailed research project will be conducted from 1993-1995 through the government R&D IRPA project to evaluate the breastfeeding status of mothers in the country.

7.0 Monitoring and Evaluation of Training Activities

Monitoring and evaluation of the training activities and the implementation of the "Ten Steps to Successful Breastfeeding" will be conducted internally by a monitoring and evaluation system and externally at midterm and end-of-term review.

7.1 Pre and Post Test

During the training course, pre- and post-test will be conducted to evaluate the knowledge and skill of trainees.

7.2 Hospital Profile

Each state team will be asked to fill the Hospital Profile form before training and ½ and 1 ½ years after training.

7.3 Survey of Mothers Leaving Hospital After Delivery

Each state team will be asked to administer a short questionnaire to a sample of 100 mothers as they leave the hospital after delivery. The same questionnaires will be administered to a sample of 100 mothers, again, 1 ½ years after the training course. A follow-up assessment of the feeding practices of these samples of mothers after return home will be conducted.

7.4 Report of Activities

State training teams completing training will also be asked to submit a half yearly report detailing achievements and any problems or constraints they are facing.

7.5 Supervision and Evaluation Visit by National Training Team

The National Training Team will conduct 2 visits to the states during the training period. The first supervision visit will be done 6 months after the training of the state teams to review their activities and to supervise the changes that are being made concerning hospital policies and practices. The second visit will be held 1 year after the first visit to evaluate the achievement of the hospital.

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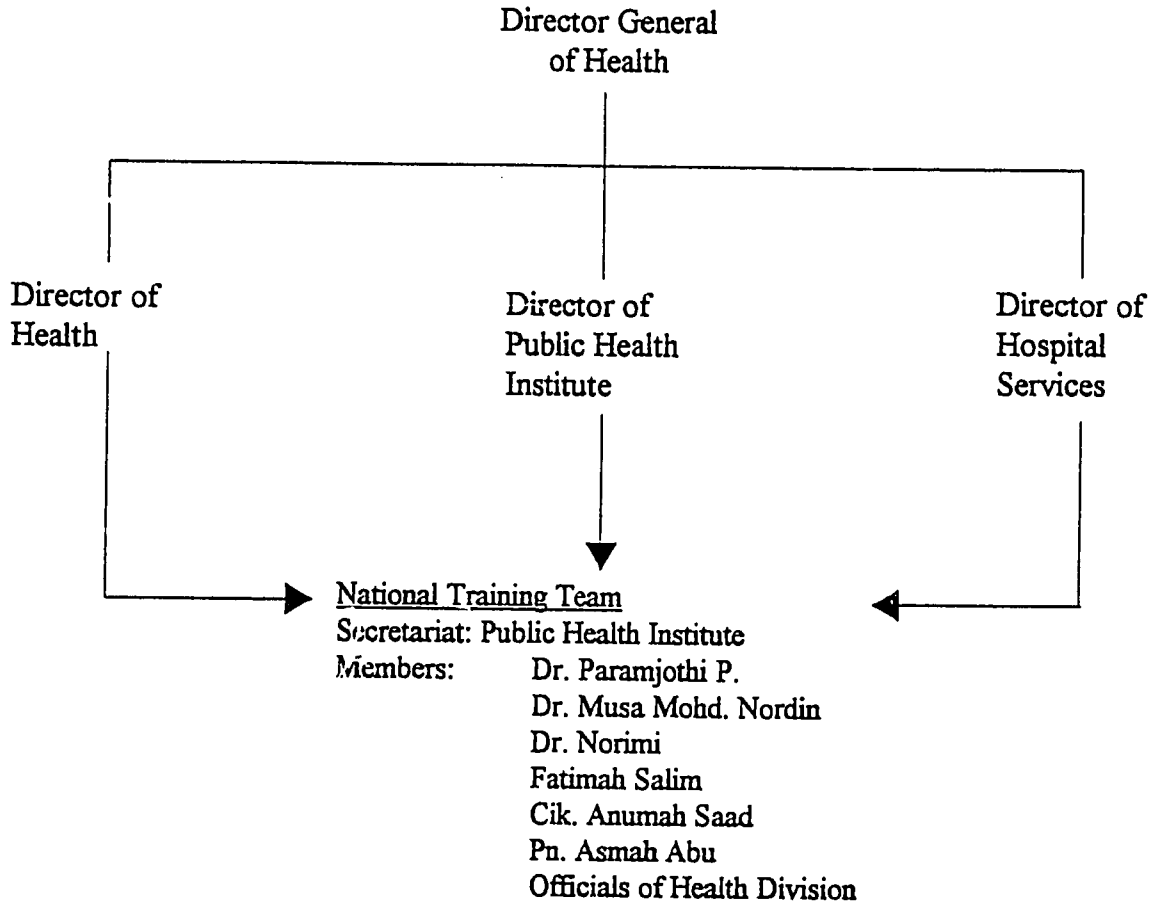
8. ORGANSIATION STRUCTURE OF NATIONAL TRAINING PROGRAM FOR THE PROMOTION, PROTECTION, AND SUPPORT OF BREASTFEDING



Appendix 1

ORIENTATION OF GENERAL HOSPITALS

ACTIVITY	Orientation of all General Hospital staff in Malaysia (obstetrics and paediatrics) on the "Baby Friendly Hospital" initiative.
OBJECTIVE	1. To introduce the Baby Friendly Initiative to all Maternity and paediatric departments (only General Hospitals) in the country. 2. To act as a fore-runner for the formal training programmes in breastfeeding. 3. To help make changes in the Departments to aid breastfeeding, before formal training is completed.
TEAM	1. Obstetrician - Dr. Paramjothi P. 2. Paediatrician - Dr. Musa Mohd Nordin
METHOD	Only lectures.
BUDGET	Ministry of Health Individual hospitals.
TIME	Half a day.
PERIOD	Two General Hospitals a month beginning December 1992; until all 13 hospitals are completed.

Appendix 2

VISIT TO FABELLA MEMORIAL

ACTIVITY Study visit to Dr. Jose Fabella Memorial Hospital, Manila in the Philippines.

TEAM Maternity Hospital, General Hospital Kuala Lumpur
Institute of Paediatrics, General Hospital Kuala Lumpur
Institute of Public Health

OBJECTIVES

1. To view the Obstetric and Paediatric departments and their set-up which facilitate and enhance breastfeeding.
2. To get first hand knowledge regarding breastfeeding problems and how practical solutions were evolved.
3. To meet with policy makers at the hospital and acquire knowledge of how they changed policies to promote and support breastfeeding practice.
4. To convert Maternity Hospital/General Hospital, Kuala Lumpur as Baby Friendly within six months of return from study time (March, 1993).

JUSTIFICATION Dr. Jose Fabella Memorial Hospital, Manila is:

a. An established "Baby Friendly" hospital.
b. World-renowned in breastfeeding promotion.
c. UNICEF symbolize them as an example in all their programs in relation to breastfeeding.

TEAM COMPOSITION

			Number
a.	Obstetricians	- Dr. Paramjothi P.	1
		- Lady	1
b.	Paediatricians	- Dr. Musa Mohd Nordin	1
		- Lady	1
c.	Senior Sisters	- Obstetrics	1
		- Paediatrics	1
d.	Nursing tutor (Midwifery)		1
e.	Senior Administrative Officer, from General Hospital, K.L.		1
f.	Officers from Ministry of Health		1
g.	Nutritionist from Public Health Institute		1
		Total	10

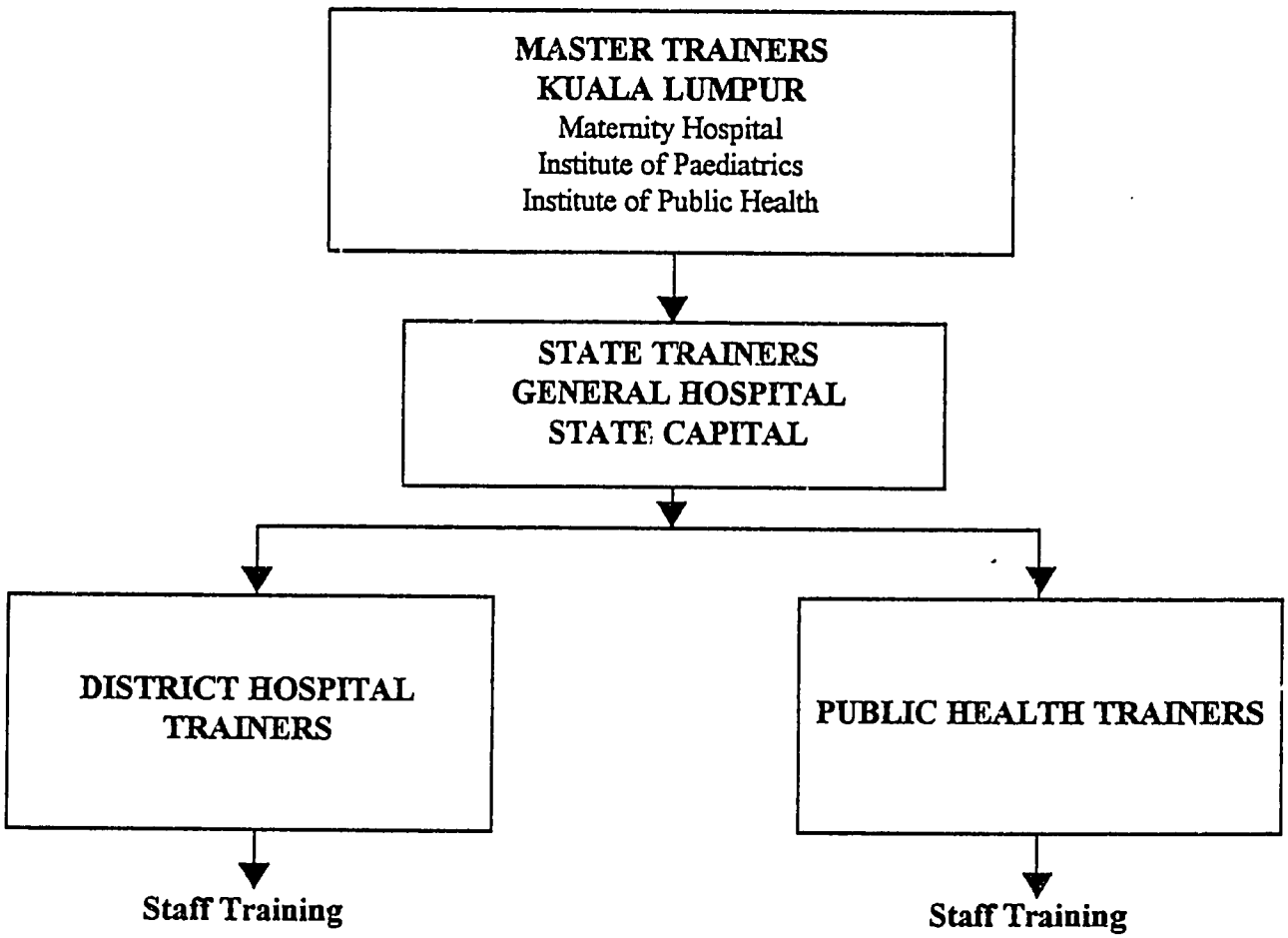
DURATION 4 days (excluding travel)

BUDGET Estimated $30,000.

SPONSOR UNICEF
Ministry of Health, Malaysia

Appendix 3

TRAINING PROGRAMME FOR TRAINERS



Phase IA
1993 — States —
1. Federal Territory
2. Perak
3. Johore
4. Kelantan
5. Penang

Phase IB
1996 — States —
1. Perlis
2. Kedah
3. Negeri Sembilan
4. Malacca
5. Pahang
6. Terengganu
7. Sarawak
8. Sabah

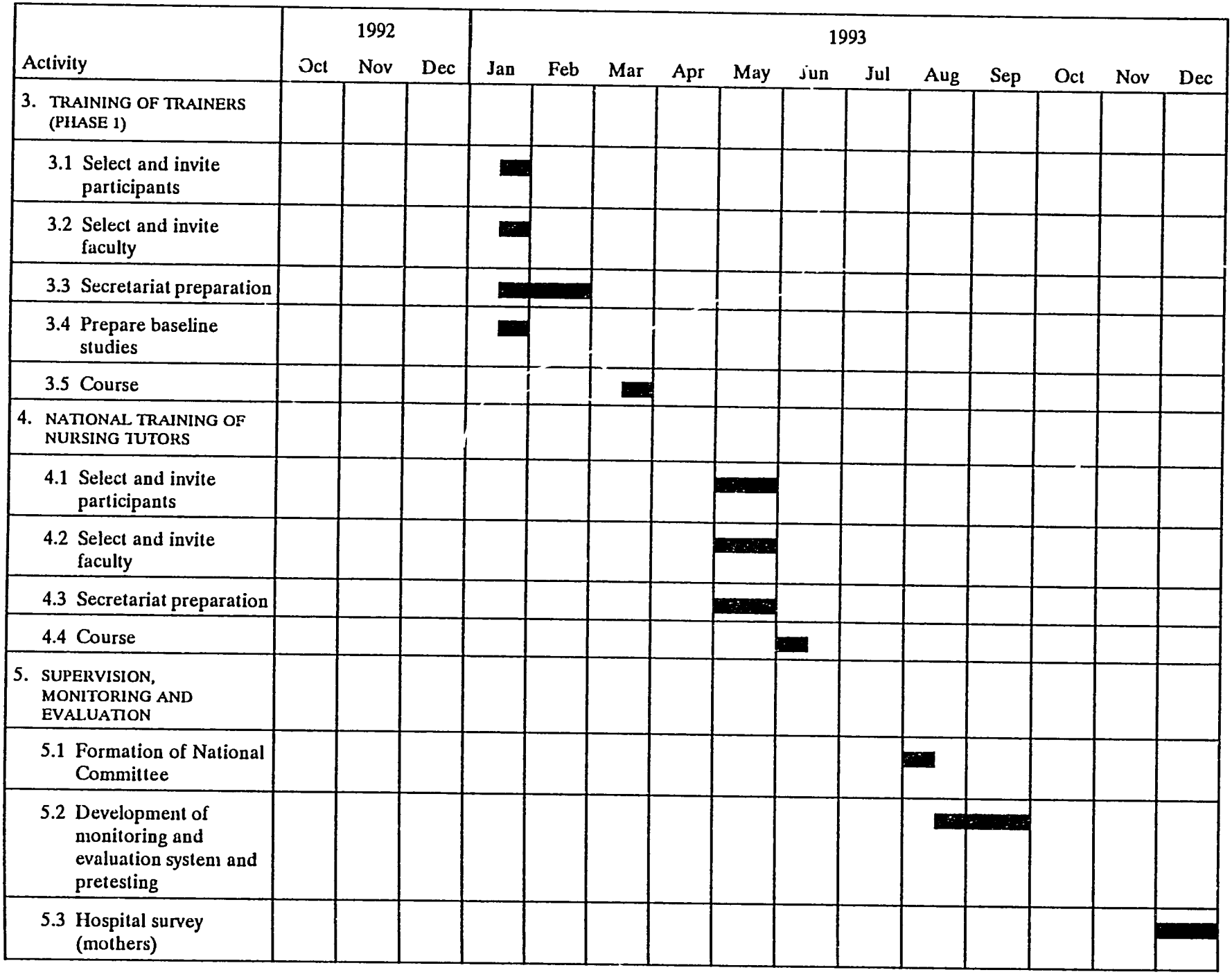
BUDGET (Malaysian Ringgit)

Activity	1992	1993	1994	1995	Possible Sources
Develop curriculum and training aids	20,000	10,000	—	—	UNICEF
Resource Centre	5,000	5,000	5,000	5,000	WHO/UNICEF
National training of state trainers	—	40,000	80,000	—	UNICEF/WHO/Ministry of Health, Malaysia (MOH)
State training of health professionals	—	50,000	80,000	—	UNICEF/MOH/WHO
National training of nursing tutors	—	25,000	—	—	UNICEF/MOH/WHO
Orientation of general hospitals	—	15,000	—	—	UNICEF/MOH/WHO
Study visit to Jose Fabella Memorial Hospital	30,000				UNICEF
Lactation Research			100,000		Intensive research in priority areas (IRPA) Ministry of Science and Technology
Curriculum integration workshop			20,000		UNICEF/MOH/WHO

Appendix 5

SCHEDULE OF ACTIVITIES

Activity	1992 Oct	1992 Nov	1992 Dec	1993 Jan	1993 Feb	1993 Mar	1993 Apr	1993 May	1993 Jun	1993 Jul	1993 Aug	1993 Sep	1993 Oct	1993 Nov	1993 Dec
1. ESTABLISH A NATIONAL LACTATION TRAINING CENTRE															
1.1 Consolidation of the two National Training Team	■														
1.2 Presentation of Director General and Health officials	■														
1.3 Establish Executive Training Committee		■													
1.4 Identify secretary and secretarial needs		■	■												
1.5 Establish computer base			■												
1.6 Visit of maternity hospital staff to Fabella Memorial Hospital, Manila			■												
2. LACTATION MANAGEMENT TRAINING															
2.1 Develop two training modules 1) Training of trainers 2) Training of hospital and health staff				■	■										
2.2 Orientation of 13 General Hospital staff				■	■	■	■	■	■	■	■	■			


Activity
1992
Oct
Nov
Dec
1993
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
3. TRAINING OF TRAINERS (PHASE 1)
3.1 Select and invite participants
3.2 Select and invite faculty
3.3 Secretariat preparation
3.4 Prepare baseline studies
3.5 Course
4. NATIONAL TRAINING OF NURSING TUTORS
4.1 Select and invite participants
4.2 Select and invite faculty
4.3 Secretariat preparation
4.4 Course
5. SUPERVISION, MONITORING AND EVALUATION
5.1 Formation of National Committee
5.2 Development of monitoring and evaluation system and pretesting
5.3 Hospital survey (mothers)

Activity	1992			1993											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
5.4 Hospital survey (practice)															
5.5 KAP survey of health staff															
5.6 Follow-up visits															
6. ESTABLISHMENT OF INFORMATION RESOURCE CENTRE															
6.1 Develop plan together with librarian															
6.2 Acquire materials, books and journals															

Activity	1994											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
7. SECOND PHASE TRAINING OF TRAINERS FIRST BATCH — FOUR HOSPITALS)												
7.1 Select and invite participants												
7.2 Select and invite faculty												
7.3 Secretariat preparation												
7.4 Prepare baseline studies												
7.5 Conduct training												
8. SECOND BATCH — FOUR HOSPITALS												

Activity	1994											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
9. CURRICULUM INTEGRATION												
9.1 Conduct national workshop									■	■		

Activity	1992				1994												1995				
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
10. RESEARCH																					
10.1 Identify research team	■																				
10.2 Develop protocol submission	■																				
10.3 Present protocol				■																	
10.4 Acquire grant							■														
10.5 Hire staff								■													
10.6 Prepara-tion									■	■	■	■	■	■	■	■					
10.7 Staff training																	■	■			
10.8 Conduct																			■	■	■
10.9 Result analysis																					
10.10 Report writing																					

Appendix 6

Curriculum for Training of State Trainers On Breastfeeding Management and Promotion

A 4-day Workshop for State Trainers

Target personnel
(State Team)

1. Obstetrician
2. Paediatrician
3. Nursing Sister - Obstetrics
4. Nursing Sister - Paediatrics
5. Nursing Sister - Health
6. State Nutritionist
7. Senior Administrator of hospital

Activities

1. Each hospital will conduct a baseline study on status of breastfeeding and a hospital profile two weeks before the course.

2. Contents of topics to be covered during the course are:

    1. Breastfeeding and Child Survival
    2. Human Milk Composition
    3. Anatomy of the Breast and Physiology of Lactation
    4. Advantages of Breastfeeding and Disadvantages of Bottlefeeding
    5. Successful Management
        - Antenatal preparation
        - Labor and Delivery
        - Early postpartum period
    6. Infant Problems
    7. Maternal Problems
    8. Separation of Mother and Infant
    9. Practice Session - Role play
    10. Practice Session - Clinical experience
    11. Controversies of Breastfeeding
    12. Ongoing Support for Breastfeeding mothers - The Role of Health Staff
    13. Code of Ethics for the Marketing of Breastmilk Substitutes
    14. Hospital Breastfeeding Policy and the Implementation of the *Ten Steps to Successful Breastfeeding*

3. Development of a state plan of action on the implementation of the *Ten Steps to Successful Breastfeeding*

Further Recommendations

1. Wellstart technical assistance to review national breastfeeding promotion program.

2. Strengthen promotion program through effective social marketing with Wellstart technical assistance.

3. Involvement of NGOs and women's organization to assist, develop and coordinate mothers support group.

4. Involvement of the private sectors (hospital and maternity homes) to actively support and participate in the national breastfeeding program.

5. National coordination of all breastfeeding promotion activities (both government and private sectors) by Ministry of Health.

6. Policy changes and legislation to support exclusive breastfeeding for the minimum of 4-6 months.

7. Two more teams to be sent to Wellstart by 1995.

8. Special training course at Wellstart for policy makers (5-day course).

9. Organisation of Asean Breast Feeding Seminar in Kuala Lumpur in conjunction with the Year of the Child in Malaysia in 1994.

Appendix 7

National Lactation Surveillance

HOSPITAL PROFILE

Name of Hospital_____

Address_____

Position in the hospital of person completing this form

_____

Date_____

1. Total bed capacity of the hospital:_____ beds

   Total number of maternity beds:_____ beds

2. Nursery capacity/location

	No. of bassinets	Location in relation to mother's bed
Level I (normal newborns)	_____	_____
Level II (potentially septic)	_____	_____
Level III (septic)	_____	_____
Level IV (intensive care unit)	_____	_____

3. Estimate of distribution of socio-economic status of maternity patients: (based on an average monthly income).

   Upper Income (> $3,000/month) _____%

   Middle Income:

   Upper Middle ($1,000 - $3,000) _____%

   Lower Middle ($450 - $1,000) _____%

   Lower Income (< $450) _____%

4. Number of deliveries in 1988:

   No. of low birth weight infants _____

   No. of premature infants (<37 weeks) _____

   No. of normal vaginal deliveries _____

   No. of caesarian section deliveries _____

5. What percent of patients who deliver in your hospital have prenatal care in your hospital?

_____ %

6. Do you give tetanus toxoid immunization at prenatal?

Yes /__/ No /__/

7. Are pregnant women informed about the benefits and management of breastfeeding by your hospital?

Yes /__/ No /__/

If so, by whom? _____

When? _____

8. How long do mothers on average stay in the hospital after delivery?

Vaginal delivery _____

Ceasarian section _____

9. What percent of deliveries are roomed-in?

Vaginal delivery _____%

Ceasarian section _____%

10. Reason(s) for not rooming-in:

_____

_____

11. How soon are babies roomed-in?

	Vaginal Delivery	C-Section
Immediately after delivery (within 30 minutes)	_____	_____
> 30 minutes to 4 hours	_____	_____
> 4 hours - 24 hours	_____	_____
> 24 hours	_____	_____

12. Reason(s) for delay of rooming-in after 30 minutes?

_____

_____

13. If rooming-in is available; are there times when babies are not with mothers?

Yes /__/ No /__/

If yes, what times (both day and night?) _____

How long? _____

Reasons? _____

_____

14. If there is no rooming-in, how do you promote breastfeeding?

Infant brought to mother's room only during feeding /__/

Mother goes to the nursery /__/

Specific place (BF room) /__/

Others, specify _____

15. While still in the hospital after the delivery, is the mother:

- shown how to breastfeed? Yes /__/ No /__/
- shown how to maintain lactation? even if she and her baby should be separated? Yes /__/ No /__/
- encouraged to breastfeed on demand? Yes /__/ No /__/

16. If information on breastfeeding is given, when is it provided?

/__/ during individual counseling sessions

/__/ during group classes

/__/ through distribution of IEC materials (please attach)

/__/ others _____

17. What is the first feeding that infants receive?

sterile water /__/

glucose water (D50) /__/

breastmilk /__/

formula /__/

others /__/ specify _____

Why? _____

18. Do breastfed infants receive any additional source of nutrition?

Yes /__/ No /__/

If yes, what is given?

water /__/

sugared water /__/

vitamins /__/

Others /__/ Specify _____

19. In your opinion, what food is best for the following infants:

Premature _____

Low Birth Weight _____

Sick baby _____

Normal baby _____

Infant with sick mother _____

20. If formula feeding is used, how is it given?

Feeding bottle /__/

Teaspoon /__/

Dropper /__/

Syringe /__/

Cup /__/

Gavage feeding /__/

Others /__/ Specify _____

21. Are breastfeeding infant given artificial teats or pacifiers while in the hospital?

Yes /__/ No /__/

22. For vaginal or C-Section deliveries:

	Type of Delivery	
	Vaginal	C-Section
% initiating breastfeeding	_____%	_____%
% breastfeeding <u>exclusively</u> at discharge	_____%	_____%
% breast and bottlefeeding ("mixed feeding") at discharge	_____%	_____%
% bottlefeeding <u>exclusively</u> at discharge	_____%	_____%
average length of hospital stay	_____%	_____%
How many hours (or days) old is the baby when first breastfeeding occurs?	_____%	_____%

23. What is your opinion about nursey care compared with rooming-in in the hospital from the following viewpoints:

	Nursery Care	Rooming-in
More economical	☐	☐
Needs less nursing personnel	☐	☐
Decreases risk of neonatal infection	☐	☐
Preferred by mothers	☐	☐
Promotes mother-infant bonding	☐	☐
Shortens hospital stay of mother and infant	☐	☐

24. Please list at least 3 most frequent situations for both mother and infant which are considered contraindications to breastfeeding in your hospital.

MOTHER _____

_____

_____

INFANT _____

_____

_____

25. What are the 2 most frequent breastfeeding problems which mothers and/or infants in your hospital seem to have?

Problem 1 : _____

_____

Problem 2: _____

_____

26. What % of patients who deliver in your hospital return for their post natal care?

_____%

27. Is any counseling on breastfeeding given to mothers after they have been discharged?

Yes /__/ No /__/

If yes, who makes the referral? To what groups are mothers referred?

_____

28. Does your hospital foster the establishment of breastfeeding support groups in any way?

Yes /__/ No /__/

If yes, how? _____

_____

29. Does your hospital have a written policy for protecting, promoting and supporting breastfeeding?

/__/ No Why not? _____

_____

_____

/__/ Yes (Please attach a copy of the policy.)

29.1 Are the policies communicated to those responsible for managing and providing maternity services? How?

/__/ Yes

Why? _____

_____

_____

/__/ No

Why not? _____

_____

29.2 Is there a mechanism for evaluating/monitoring the effectiveness of the breastfeeding policy?

Yes /__/ No /__/

If yes, how is this done? _____

_____

_____

10. Have members of the Perinatal Nursery staff of your hospital had formal training on lactation and BF management?

Yes /__/ No /__/

If yes, what percentage have been trained?

	PHYSICIANS	NURSES
< 25%	_____	_____
25 - 50%	_____	_____
51 - 75%	_____	_____
> 75%	_____	_____

	Training # 1	Training # 2	Training 3
Where?			
For how long?			
Who conducted?			
How many participants?			

31. What is your opinion on the following statements?

		AGREE	DISAGREE
31.1	Breastmilk is best but infant formula is a good substitute for breastmilk	/__/	/__/
31.2	Breastmilk can still be to low birth weight and premature infants even when they cannot suck	/__/	/__/
31.3	Sucking increases breastmilk supply so that "starter" infant formulas actually prevent breastmilk production and breastfeeding	/__/	/__/
31.4	Giving an artificial nipple to a newborn interferes with its ability to learn how to correctly suck from his mother's nipple	/__/	/__/
31.5	The Milk Code imposes restriction on physicians and deprives mothers of the freedom to choose the best milk for their babies.	/__/	/__/
31.6	Provision of milk formula samples to mothers before they leave the hospital is a good practice	/__/	/__/
31.7	A mother usually has no milk immediately after delivery so the infant should be given a bottle first so he will not go hungry	/__/	/__/
31.8	Mothers who delivered by C-section are not capable of breastfeeding for at least 1-2 days	/__/	/__/

32. Would you be interested to attend a lactation management education class?

Yes /__/ No /__/

How many days are you available? _____

_____

Appendix 8

National Lactation Surveillance

SURVEY OF MOTHERS LEAVING HOSPITAL AFTER DELIVERY

Date:_____

1. Information about mother and child:

   1.1 Name of mother_____

   1.2 Address_____

   1.3 Identity care number_____

   1.4 Medical record number_____

   1.5 Hospital of birth_____

   1.6 Name of infant_____

2. What date was your baby born?_____

3. Was the baby brought to you to nurse after the delivery?

   ☐ Yes ☐ No

   If yes, how soon after delivery?

   ☐ Within one half hour
   ☐ Within one hour
   ☐ Within two hours
   ☐ Within four hours
   ☐ Within six hours
   ☐ Within eight hour
   ☐ Within ten hours
   ☐ Within twelve hours
   ☐ Others_____
   (specify)

4. Did your baby room-in with you while you were in the hospital?

   ☐ Yes ☐ No

   If yes, were there any times that the baby was not with you?

   ☐ Yes ☐ No

   If yes, when?

5. What are you feeding the baby now?

/__/ breastmilk only

/__/ breast and bottle

/__/ bottle

/__/ other _____.

6. Do you feed on demand or at fixed intervals?

/__/ on demand

/__/ at fixed intervals

7. (If mother is not breastfeeding) Why did you decide not to breastfeed?

_____

_____

_____

8. Did you feed the baby anything other than breastmilk while you were in the hospital?

/__/ Yes /__/ No

If yes, what?

/__/ water

/__/ formula

/__/ other _____

9. Was the baby feed anything other than breatmilk by hospital staff, to the best of your knowledge?

/__/ Yes /__/ No

If yes, what?

/__/ water

/__/ formula

/__/ other _____

10. Was there a class on breastfeeding while you were in the hospital?

/__/ Yes /__/ No

If yes, how long was the class? _____

Who gave it? _____

Did you attend?

/__/ Yes /__/ No

11. Did you receive any individual counseling or advice on how to breastfeed or on breastfeeding problems?

/__/ Yes /__/ No

If yes, who gave you counseling or advice? _____

_____

What did he/she discuss? _____

_____

How long did those giving you counseling spend with you, in total?

_____ minutes

12. (If mother is breastfeeding) Are you having any problems now with breastfeeding?

/__/ Yes /__/ No

If yes, what? _____

_____

Did the hospital give you anything to feed the baby at home?

/__/ Yes /__/ No

If yes, what? _____

13. (If mother is breastfeeding) How long do you plan to breastfeed?

_____ weeks or _____ months

14. When do you plan to start giving liquid or food other than breastmilk to your baby?

_____ weeks or _____ months

15. What liquid or food will you give first?

_____

Appendix 9

National Lactation Surveillance

REPORT ON ACTIVITIES

Name of hospital:_____ Date:_____

Address:_____ State:_____

Name of person completing form:_____

Professional position:_____

Date team received training at Center:_____

1. Which of the following activities pertaining to lactation management and breastfeeding have occurred since you made your last report because of your team's participation in the Center's Lactation Management Course:

1.1 ☐ Workshops or courses for your other hospital staff? How many?____

1.2 ☐ Workshops or course for staff of other hospitals or facilities?

How many?_____

1.3 ☐ Workshops or courses in the local community? How many?_____

1.4 ☐ Other training activities? Please describe_____

_____

_____

1.5 ☐ Research? Please describe_____

_____

1.6 ☐ Audio visual material development? Please describe_____

_____

1.7 ☐ Proposal writing? Please describe_____

_____

1.8 ☐ Establishment of rooming-in? Please describe:_____

_____

_____

1.9 ☐ Establishment of lactation clinic(s)? Please describe:_____

_____

1.10 /__/ Other changes in hospital procedures? Please describe: _____

_____

_____

1.11 /__/ Promotional activities? Please describe: _____

_____

_____

1.12 /__/ Other activities: Please describe: _____

_____

_____

2. Please fill in the information below on each of the workshops, courses or other training activities listed on the first page. (If there were more than two training activities please attach an extra sheet.

2.1 Training activities # 1:

Name of course or workshop: _____

Date held: _____ Where held: _____

Total number of participants: _____

Numbers of various types of participants:

___ nurses ___ residents

___ midwives ___ medical students

___ pediatricians ___ nursing students

___ obstetricians ___ other (specify): _____

How long was the training activity? _____

What was the content of the course or workshop? (please attach agenda)

_____

_____

2.2 Training activities # 2:

Name of course or workshop: _____

Date held: _____ Where held: _____

Total number of participants: _____

Numbers of various types of participants:

___ nurses ___ residents

___ midwives ___ medical students

___ pediatricians ___ nursing students

___ obstetricians ___ other (specify): _____

How long was the training activity? _____

What was the content of the course or workshop? (please attach agenda)

_____

_____

3. Which of the following activities pertaining to lactation management and breastfeeding have not yet been accomplished but are in the planning or development process?

3.1 /__/ Workshops or courses for your other hospital staff? How many? __

3.2 /__/ Workshops or course for staff of other hospitals or facilities? How many? __

3.3 /__/ Workshops or courses in the local community? How many? __

3.4 /__/ Other training activities? Please describe: _____

_____

3.5 /__/ Research? Please describe: _____

_____

3.6 /__/ Audio visual material development? Please describe: _____

_____

3.7 /__/ Proposal writing? Please describe: _____

_____

3.8 /__/ Establishment of rooming-in? Please describe: _____

_____

3.9 /__/ Establishment of lactation clinic(s)? Please describe: _____

_____

3.10 /__/ Other changes in hospital procedures? Please describe: _____

_____

3.11 /__/ Promotional activities? Please describe: _____

_____

3.12 /__/ Other activities: Please describe: _____

_____

4. What do you consider to be the two (2) biggest accomplishments in your hospital since your last report?

_____

_____

5. What do you consider to be the two (2) biggest problems you (and your team) face and still must overcome?

_____

_____

6. Do you need any further information or technical support from Center staff?

/__/ Yes /__/ No If yes, please describe: _____

_____

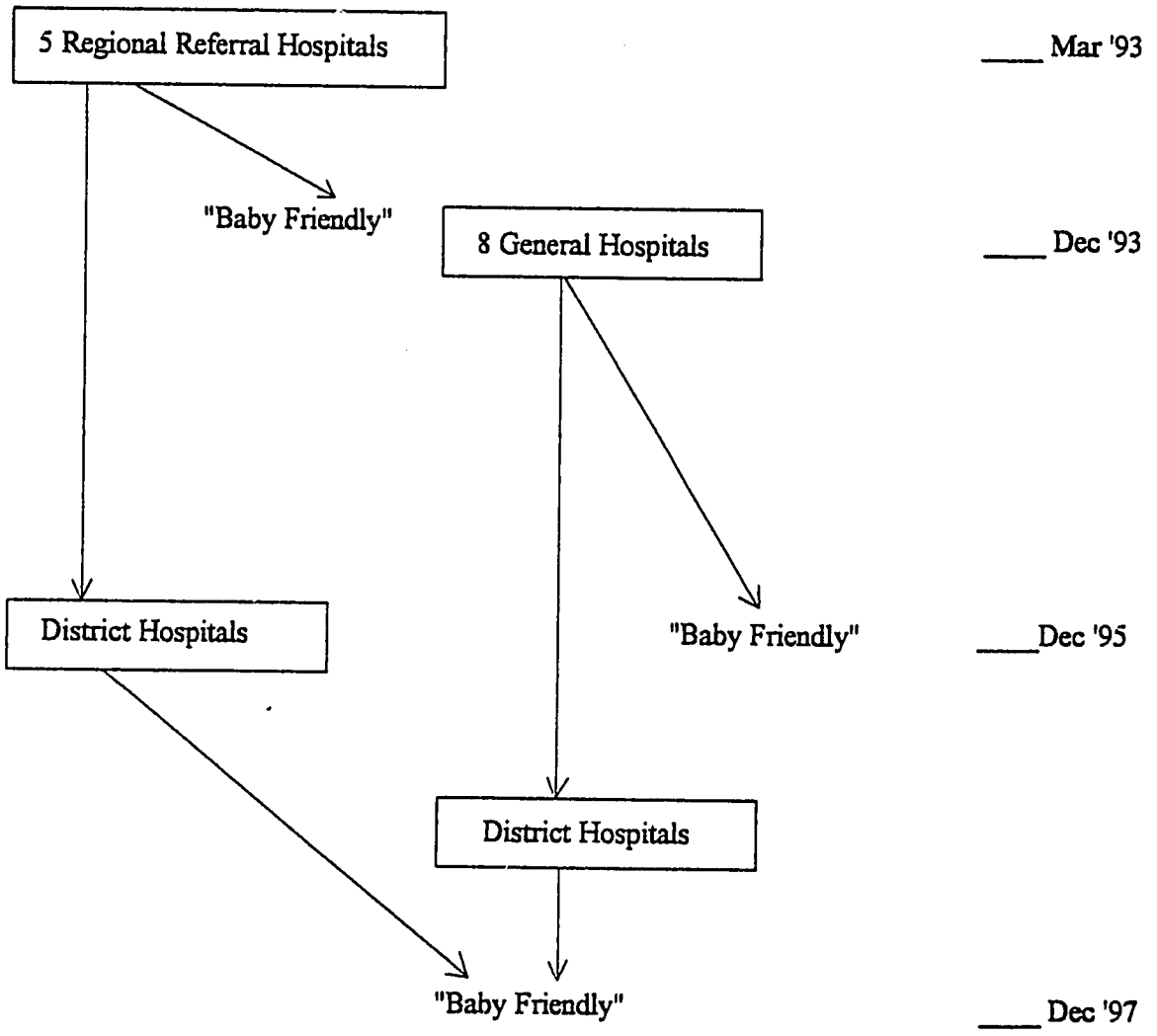
7. Do you or other staff in your hospital need any further training or practical experience in lactation management or related areas?

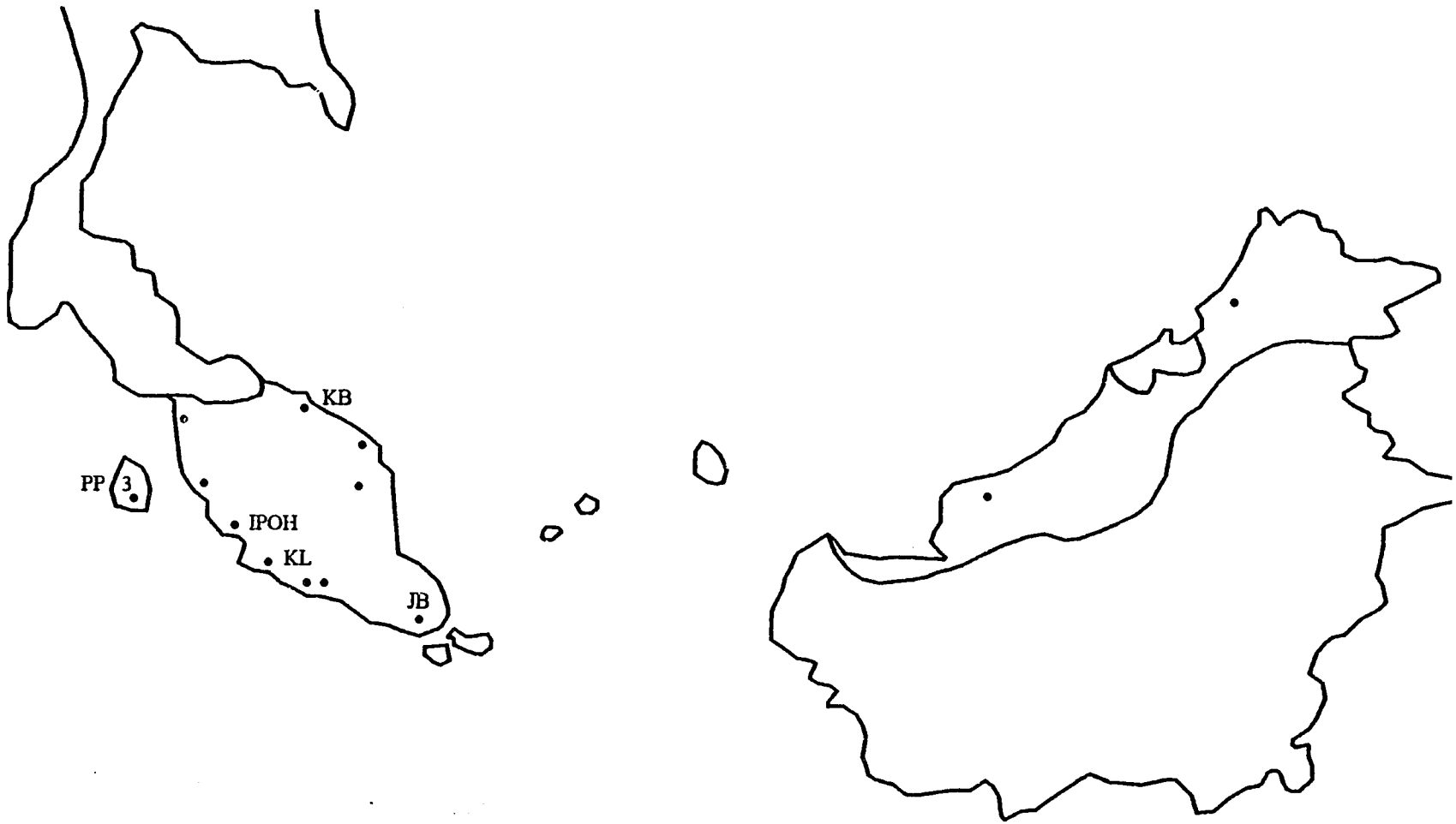
/__/ Yes /__/ No If yes, please describe:

Who needs training:	Type of training or experience needed:
_____	_____
_____	_____
_____	_____

8. Any other comments or suggestions for Lactation Training Center staff:

_____


5 Regional Referral Hospitals
Mar '93
"Baby Friendly"
8 General Hospitals
Dec '93
District Hospitals
"Baby Friendly"
Dec '95
District Hospitals
"Baby Friendly"
Dec '97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PLAN OF ACTION FOR BREASTFEEDING PROMOTION IN RUSSIA, UKRAINE, AND KAZAKHSTAN

Dr. Elena Stroot

Dr. Susan Welsby

Presented September 4, 1992

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BACKGROUND

Russia

General

It has a population of 148 million. 53.4% live in urban areas. 81.5% are Russians but there are over 100 minorities. The government applied a shock therapy approach when introducing market reforms to Russia. This economic conditions have resulted in massive increases in food prices. Some basic foods remain in short supply or are not available at all. Many Russians citizens have been forced to spent their savings on food and are using up their food reserves. The most vulnerable social groups in this situation are children, the elderly, students, single-mothers, and other people with fixed income from national or local budget resources. Despite the current economic challenges, Russia is rich in raw materials and has the potential to develop an independent economy.

Health

The Health system of the former USSR was chronically under-funded. The number of physicians and hospital beds in Russia in 1987 was 4,6 and 13,6, respectively, per 1,000 population. Life expectancy at birth in Russia in 1989 was 64,2 years for males and 74,5 years for females, compared to 71,5 and 78,4 years for males and females respectively, in the United States in 1987. Cardiovascular disease and alcohol-related diseases are epidemic in adults in Russia. More than one sixth of the average household budget is spent on hard liquor.

Actual infant mortality rate (IMR) is estimated to be 25 deaths per 1,000 live births, caused by infectious, parasitic and intestinal diseases, respiratory diseases, congenital anomalities, accidents and poisonings. The fertility rate in Russia has increased since 1969 from 1,9 to 2,1 by 1984-85. The maternal mortality rate (MMR) in 1989 was 49,0 deaths per 100,000 live births. Toxemia is the most common cause of maternal mortality, followed by infections, hemorrhage and hepatitis. Pregnant women are routinely checked for anemia and 20 to 25 percent are found to be anemic; in Siberia and northern parts of Russia, that percentage is 30 to 35. Malnutrition among poor pregnant women is likely to be a problem especially during the critical economic transition period. The incidence of low birth weight is not clear. While the official national incidence stands at 5.7% (1989), it was 8.9% in a major maternity hospital in St. Petersburg (1991).

Insufficient equipment, supplies and drugs also contribute to maternal mortality, as does the overall lack of family planning information and services. The use of modern contraceptive methods in Russia is low, predominantly due to a shortage of modern contraceptives, insufficient medical and paramedical education, and lack of family planning information and services. The IUD is the most popular contraceptive method in Russia and used by 17,2 percent of the women.

Breastfeeding

The majority of births occur in hospitals, 50 percent of which have modern equipment. An estimated 70 to 80 percent of mothers leave the hospital breast-feeding while the remaining percent of mothers do not breastfeed due to complications at delivery, hypogalactia, premature birth or mastitis: a delay in breastfeeding is often due to hemorrhage or a caesarian delivery. The rate of breastfeeding is reported to be 50-80% at birth, 50-60% three to four months after birth, and then decreasing rapidly to 10-20% at one year. A book being published soon by the chief paediatrician at St. Petersburg will include figures on breastfeeding in Russia. Babies are examined at the polyclinic once a month until 12 months old; each time the baby's weight and

measurements (height and head circumference) are recorded and plotted on a growth chart, but no data base is available on breastfeeding. While underweight and dystrophy are uncommon, obesity is increasing due to typically high carbohydrate diets fed to babies.

The lack of infant formula are very frequently mentioned and measures have already been taken in the Russian parliament to give priority to its production in the country. Breastfeeding was never mentioned as an alternative unless suggested by WHO/UNICEF.

Ukraine

General

The population is 52 million, with 2,8 million people in Kiev (the capital), including 640,000 children. Approximately 26 percent of the population is retired. There are 12 million women of childbearing age.

In Ukraine 90,000 people were evacuated from the 30 km radius zone surrounding Chernobyl and another 40,000 have moved out of nearby areas since 1986. Overall, the Ukrainian government estimated that 1.1 million people were affected in some way by the disaster, including 350,000 children. Nineteen of the 27 regions in Ukraine suffered some effects of the disaster.

Health

The health care system has provided high coverage and easy access, at minimal or low cost to virtually anyone. Most of medical care is provided by doctors, up to a one third of whom specialize in pediatrics and obstetrics. Life expectancy at birth in Ukraine is 66,1 and 71,5 in 1986, respectively male and female in comparison with 75,2 and 78,4 in the USA in 1987. Total fertility rate in Ukraine fluctuated from 2.044 in 1970 to 1.987 in 1980 and to 2.055 in 1985. Infant mortality rate slightly declined from 17.2 in 1970 and 16.6 in 1980 to 14.5 in 1987. Crude birth rates in Ukraine have decreased since 1989, falling from 14,6 in 1989 to 13,4 in 1990 to 12,0 in 1991. According to a UNICEF/WHO mission report in early 1992, the Ministry of Health reported in June 1991 that there was a negative population growth rate for the first time in Ukraine. Women bear a particularly heavy burden; more than 80% are employed full-time and are often poorly paid and in the most menial positions.

Women's reproductive health is substantially compromised by widespread anemia, presumably related to inadequate diet, frequent abortions, and in the minds of many, environmental pollution. Fertility has been regulated predominantly by abortion, for which rates sometimes exceed birth rates. Oral pills and condoms are often of substandard quality and their supply is erratic. Traditional, unreliable methods are used by more than half of the women practising birth control. Population and family planning policies are lacking and the country has made insufficient effort to educate the public regarding contraception.

Child birth invariably takes place in hospitals, although common obstetric practices and low rates of operative interventions appear to account for a high proportion of birth injuries and a significant number of early neonatal deaths related to obstetric problems. High maternal mortality in outlying areas is related to abortion rates, the absence of blood banks, low Caesarian-section rates, and more recently the non-availability of antibiotics and other essential drugs.

Breastfeeding

There has been a long-term decline in breastfeeding aggravated by the importation of milk formula and recently exacerbated by public fears of toxin's in mothers' milk. Substantial numbers of infants are now bottlefed, even though supplies of formula milk are diminishing, expensive and difficult to obtain. While initiation of breastfeeding in maternity hospitals is relatively high (70-80% in rural areas and often over 50% in urban areas) there is little support by the medical profession and the public to the importance of continued breastfeeding. Medical workers cite a wide range of excuses for not encouraging lactation, ranging from widespread anaemia to the effects of radiation, to poor diet, social stress and a general disregard for the importance of breastmilk to the health of children. There is extensive advertising and promotion of infant formulas in health care clinics, maternity wards and hospitals. Mothers are encouraged to introduce formula and other food supplements early from 6 weeks, and invariably such foods are recommended to all from 3 months onwards. In spite of this many women lactate successfully and breastfeeding continues in continues in perhaps 50% of children well beyond 3 months of age. The government are attempting to continue providing milk supplements directly to infants and young children and their mothers through milk kitchens located in both rural and urban areas. Many of these kitchens are not working due to milk shortages.

Kazakhstan

General

Kazakhstan is the third largest country in the CIS and the richest of the 5 Central Asian countries. It has traditionally supplied raw materials and food but depends upon imports for all finished goods including dried milk. The population is 17 million (1991) and is growing at an annual rate of 2% with a doubling time of 28 years. Birth rate is 23/1000 rising to 40 in remote areas, and the abortion rates are the same. Ethnic Kazakhs compromise 42% and Russians 39% of the population. 59% of the population is urban based. Large families are common amongst the Kazakhs with 15% having 7 or more children. There is a high literacy rate and Russian is the main language. The Kazakhs are Muslem but purdah is hardly ever practised. Alma-Ata, the capital city, has a WHO collaborating centre for Primary Health Care and USAID plans to establish a regional office for Central Asia there. Radio and TV are universal but the printed media is threatened by a shortage of paper. There is a rapid emergence of NGO's and citizen groups. Prices are soaring and social support systems are strained. Most of the family income is spent on food and the diet is deteriorating.

Health

There is an extensive health infrastructure with dwindling supplies and low staff morale. Medical training institutes strongly desire help to revise curricula and training at all levels. Professional capacity in the health, medical and research fields is considerable and could be harnessed. 5-7% of infants are low birth weight. Major illnesses in children are respiratory and gastrointestinal. The IMR of 25/1000 may reach 45 in remote areas. Maternal MR is 80/100,000 rising to 160 in remote areas.

Breastfeeding

Prenatal care is almost universally provided by midwives at Community Health posts. Nearly all births occur in a Maternity unit assisted by a Doctor Gynaecologist. There is a low C-section rate, less than 3%. Normally babies are put immediately to the breast at birth but then separated from their mothers and fed on a rigid 3 and a half hour schedule. Breastfeeding is

high at birth, 90%, but declines to 70% at 3 months. Breastfeeding is the rule in rural areas but formula is often allowed or even encouraged in the urban centres and commercial formulas are displayed in the waiting rooms of even rural MCH clinics. There are few incubators, so heat loss of small babies is a problem. Normal babies and mothers are discharged from the maternity 6 days after birth. Throughout infancy, babies are checked monthly and weighed but no growth chart is kept. Bottlefeeding is introduced early for at least half of the babies, and by 3 months, all children are encouraged to have extra solids. Hospitalization for even mild illness is frequent (once per child per year). Decline in breastfeeding in women has been attributed to inadequate nutrition, environmental pollution, contrary medical advice and anaemia. Stress and depression are said to be increasing problems in women due to the psychological burden of supporting their families in these troubled times.

Breastfeeding Problems in the CIS

It would appear that there are low rates of exclusive breastfeeding and breastfeeding of short duration in all 3 countries because breastfeeding has been given low priority in the former Soviet Union over a prolonged period of time. It is believed that these ratios have been artificially lowered in the official statistics together with IMR and MMR. The following is a list of policies and practices working against the promotion and protection of breastfeeding in the CIS at the present time:

1. Poor hospital practices (insensitive delivery practices, prelacteal feeds, formula supplementation, no rooming in, rigid feeding regime).
2. Poor health staff morale, counselling skills and training.
3. Supply of free USSR produced formula milks. State awards given to health personnel distributing these dried milks.
4. No appropriate curricula and teaching aids on lactation management.
5. No reporting of breastfeeding indicators from health facilities.
6. Limited food supplies for pregnant and lactating mothers and no policy for supplementation.
7. Fear of breastmilk contamination (pesticides, industrial waste products, irradiation) by both the public and health staff.
8. Lack of public awareness. Mass media not utilised for breastfeeding promotion.
9. No community based or hospital based support for lactating mothers.
10. Too many other priorities for a newly independent country in transition.

Positive Factors

At the same time there are some policies and institutions still intact (at least for the immediate future) that can work towards the promotion and protection of breastfeeding. These include the following:

1. Extended maternity leave.
2. Day care and breastfeeding breaks at the work site.
3. Women's committees.
4. Comprehensive health care for all (pre and postnatal).
5. A high proportion of female health personnel.
6. Underemployed research institutions.
7. A strong "top down" system of command.
8. Government controlled mass media.

These should be utilised, whilst they still exist, in the aggressive promotion of breastfeeding.

Problems to be Addressed

The following problems should be addressed by this proposed breastfeeding programme:

1. Policy makers' lack of awareness.
2. Lack of health staff trained in lactation management.
3. Low public awareness.

GOALS AND OBJECTIVES.

Goal

The general goal of the programmes in all 3 countries will be to increase the prevalence of exclusive breastfeeding up to 4-6 months of age by 30% from baseline in women attending government polyclinics in central and regional hospitals by the end of the second year of the programme.

Objectives

By the end of the second year of the programme, the following 10 step objectives should be achieved:

- 80% of central and regional hospitals will have written breastfeeding policies.
- 50% of maternity staff (nurses, midwives, nutritionists, neonatologists, paediatricians, obstetricians) from central and regional hospitals will have attended an 18 hour lactation management course.
- 50% of a random sample of pregnant women 32 weeks or more gestation attending the antenatal clinic of the central and regional hospitals will know at least 2 benefits of breastfeeding.
- There will be an 80% increase from baseline of babies born by vaginal delivery (30% increase for C-sections) in central and regional hospitals who will be put to the breast within the first hour.
- 50% of a randomly selected group of 3-5 day postpartum mothers in central and regional hospitals will be able to demonstrate correct positioning and attachment with their own babies. 30% will be able to demonstrate hand expression of their own breastmilk.
- No food or drink other than breastmilk will be given unless medically indicated to 50% of babies over baseline in central or regional hospital maternity units.
- Rooming-in will be instituted for 50% of babies born by vaginal delivery in 30% of the maternity units of central and regional hospitals over baseline.
- Breastfeeding on demand will be the policy for 80% of babies born by vaginal delivery in 50% of central and regional hospitals over baseline.
- No pacifiers will be given by the hospital staff to babies in 70% of central and urban hospitals.
- 20% of central and regional hospitals will foster the establishment of breastfeeding support groups through discussions with local women's groups in their areas.

Other objectives not strictly related to the 10 steps Baby Friendly Hospital initiative include a more sensitive attitude to labouring women, doula support from student midwives during labour and fathers being allowed to attend the deliveries. Breastfeeding should be seen as a woman's right and a child's right.

STRATEGIES AND ACTIVITIES FOR EACH COUNTRY

The initial programme should focus on the following, however, all steps need to be adapted to the special needs of each country:

Step 1: Orientation of policy makers

- Arrange a meeting with politicians and ministry of health, education and social welfare policy makers to discuss the advantages to the country of a breastfeeding programme. Discussions should focus on the code of marketing of breast milk substitutes and policies for working mothers (maternity leave, day care) and mother's support groups. Preferably involve Dr. E. Helsing from WHO Europe, UNICEF and USAID/Wellstart personnel in this meeting.
- Work with policy makers on a cost-benefit analysis.
- Arrange a 1-2 day orientation workshop for the policy makers and medical academics/researchers.
- Arrange a needs assessment workshop in which the policy makers and academics together with hospital directors, mass media experts and UN/USAID personnel perform an evaluation of the present situation (health facility practices, health staff and community KAP, lactation research in the CIS, mass media promotion etc.). At the end of the workshop the participants should come up with recommendations for a breastfeeding programme with a plan of action and timetable for the appointment of a national breastfeeding programme coordinator, the formation of a national steering committee and working groups in the following areas:
  - Policy and strategy.
  - Hospital Lactation Management Education.
  - Mass Media and Health Education Campaign
  - Research and evaluation.

The **policy and strategy working group** should focus on the following priorities in 1993.

- The country to become a signatory to the code of BMS marketing.
- Enforcement of the code.
- Banning multinationals from manufacturing formula milks in the country. Manufacture should remain a CIS responsibility. Nestle already has a factory in St. Petersburg.
- Limiting assistance/sponsorship from the breastmilk substitute (BMS) industry.
- Protection of breastfeeding in the workplace (maternity leave, day care etc.).
- Protection of breastfeeding in health facilities by adopting the Baby Friendly Hospital Initiative
- Free mass media advertising for breastfeeding programmes.
- Mothers support groups (liaison with La Leche League etc.)
- Developing a twin hospital programme.

Step 2: Training of health personnel

The **hospital lactation management education working group** should focus their activities on the following:

- Gathering available training materials in Russian. Arrange translation of further materials.
- Setting up a database at an appropriate centre (the WHO centre, government nutrition institute etc.) using Wellstart reprint set and training materials, and initiating translation

- Developing appropriate training packages for hospital administrators, doctors, nurses, midwives, nutritionists based upon the results of the needs assessment.
- Coordinating with other training programmes that may be planned (ie. EPI, CDD, ARI) and possibly integrating training activities.
- Selecting a team of government trainers.
- Selecting a central teaching hospital to be developed as the model "Baby friendly" hospital.
- Arranging workshops for the hospital directors, doctors, nurses, and midwives, who will later serve as trainers themselves.
- When 80% of the "Baby friendly" hospital practices have been implemented and personnel trained, arranging a series of workshops for health staff from regional hospitals (see diagram of national training plan).

Step 3: Mass media campaign using social marketing techniques

The mass media and health education working group with the assistance of a social marketing expert will develop messages for radio and TV programmes/spots using the results of the community KAP studies. They should work towards implementing the following if these are found to be culturally appropriate:

- A breastfeeding week in 1993.
- 5 radio spots.
- 5 TV spots.
- Breastfeeding promotion in 2 popular TV and radio soap operas.

Step 4: Research and Evaluation

The research and evaluation group will focus their work on the following in 1993:

- Developing a monitoring and evaluation system for the national BF promotion programme and utilising of results for programme improvement.
- Improving surveillance of IMR and MMR and breastfeeding indicators in different demographic groups.
- Developing research proposals on topics such as:
  - Ethnographic studies of breastfeeding practices in the community (rural and urban).
  - Preterm nutrition and growth patterns.
  - Kangaroo care method
  - " Doula" support and presence of father during labor and delivery.
  - Contamination of breastmilk and DSM by pesticides, industrial waste products and irradiation (Ukraine and Kazakhstan are both irradiation contaminated areas).
  - Costs and savings of improving hospital breastfeeding practices.
- Arranging working meetings to disseminate research results and plan for their application.
- Establishing collaborative research projects with research units in other countries (i.e. Wellstart associates etc.).

ORGANIZATION AND STAFF

WHO has been working for many years in the former Soviet Union and could act as a catalyst for this programme in collaboration with UNICEF and USAID/Wellstart. There is a WHO task force for the CIS in WHO headquarters, Geneva. WHO and UNICEF regional offices are collaborating on the Baby Friendly Hospital initiative. Dr. E. Helsing, WHO Regional Advisor for Nutrition in Copenhagen, has already discussed breastfeeding promotion programmes with policy makers in the Ukraine and Russia and with the assistance of Dr. Elena Stroot initiated

Baby Friendly programmes in 2 hospitals. Dr. E. Helsing has also visited Alma-Ata several times. USAID is also very actively involved in breastfeeding promotion and has established missions in Moscow and Alma-Ata. The impact of any breastfeeding initiative will be much enhanced by the participation of all these agencies in a coordinated programme, perhaps by means of an interagency task force.

International liaison officers with some lactation education would need to be recruited by the interagency taskforce to coordinate activities between the donors and the government and perform the "ground work", working with the national coordinator, steering committee and 4 working groups. The national coordinator and chairpersons of the 4 working groups should be senior government employees selected by the policy makers with salaries coming from the government (see budget). The working groups will be supervised by the national coordinator and should report regularly to the steering committee. They will be located in government buildings such as the Ministry of Health, Maternal and Child Health Centre or a research institution. Additional technical assistance from international agencies would be required to support the steering committees and working groups in the following:

- developing a cost-benefit analysis
- designing social marketing strategies for media campaigns
- organizing training
- designing research (anthropological, operational, etc.) strategy.

EVALUATION

An evaluation mechanism should be built into the design of this breastfeeding promotion programme. A process of internal evaluation conducted by the national steering committee should take place on a yearly basis and external evaluation conducted by the donors and other CIS country teams on a 2 yearly basis. The objectives for the 10 steps can be used as easily measurable indicators of the success of the Baby Friendly Hospital initiative. The tasks for the 4 working groups in 1893 can be used as process indicators. For the overall long-term evaluation of the programme the following indicators should be obtained at the initiation of the programme and 2 yearly intervals initially for urban based women and then for rural women on completion of training at the clinic level:

- Exclusive breastfeeding rate.
- Predominant breastfeeding rate.
- Timely complementary feeding rate.
- Continued breastfeeding rate (1 year and 2 years).
- Bottlefeeding rate.

Individual hospitals will be taught during the 18 hour workshops how to do their own internal monitoring evaluation to assist in the process of reaching the 10 steps.

BUDGET*

	1993	1994	1995	Total
Furniture, Equipment, and Supplies				
Furniture				
15 tables	*0	*0	*0	*0
25 chairs	*0	*0	*0	*0
10 file cabinets	*0	*0	*0	*0
40 classroom chairs	*0	*0	*0	*0
20 book shelves	*0	*0	*0	*0
SUBTOTAL	*0	*0	*0	*0
Equipment				
2 slide projectors	400	-	-	400
2 overhead projector	800	-	-	800
2 VCR's	600	-	-	600
2 Caramate projectors	2,200	-	-	2,200
6 slide trays	60	-	-	60
7 computer and hard drive	21,000	-	-	21,000
2 laser printer	6,500	-	-	6,500
1 dot matrix printer	500	-	-	500
1 photocopier Large	1,500	-	-	1,500
Small	1,000	-	-	1,000
1 FAX machine	1,200	-	-	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	1,700	-	-	1,700
Chest Models	360	-	-	360
4 Baby dolls	2,200	-	-	2,200
12 Marshall-Kaneson manual pumps yearly	288	144	144	576
24 Pigeon nipple pullers yearly	180	180	-	360
24 Nipple shields yearly	90	90	-	180
SUBTOTAL	43,373	414	144	43,931

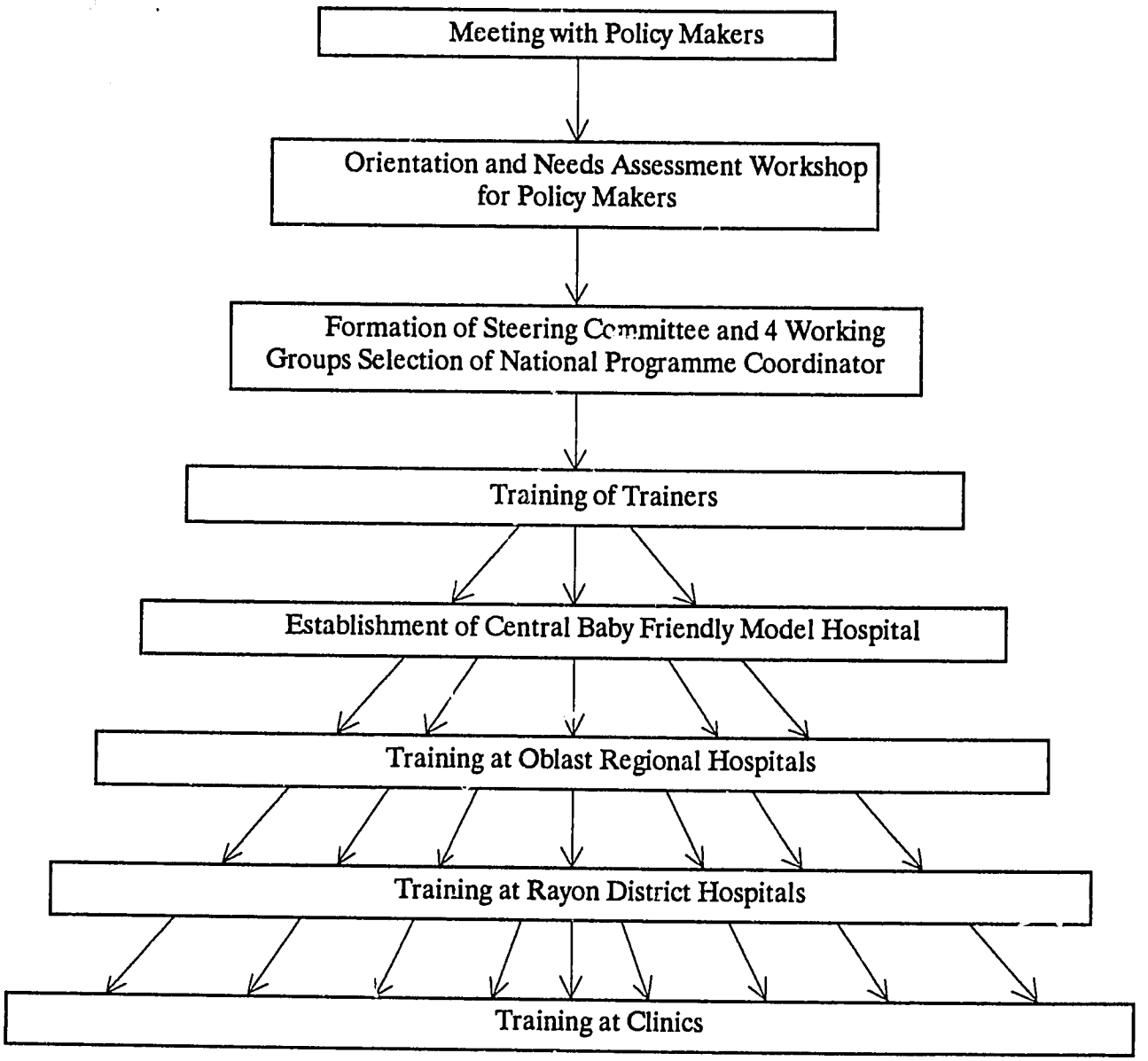
*Government contribution

	1993	1994	1995	Total
Supplies				
2 boxes floppy diskettes	40	45	50	135
20 boxes transparencies	200	220	240	660
8 flip charts	120	130	140	390
24 rolls photographic film	120	132	144	396
miscellaneous (paper, envelopes, folders, markers, pens, pencils, staples, puncher, binder, clips, pads, tabs,labels, etc.)	1,000	600	660	2,260
SUBTOTAL	1,480	1,127	1,234	3,841
Personnel and Administrative Expenses				
Economist (50%)	*0	*0	*0	*0
Anthropologist	*0	*0	*0	*0
Legal (50%)	*0	*0	*0	*0
Public Health & Epidemiology	*0	*0	*0	*0
Obstetrician	*0	*0	*0	*0
Pediatrician	*0	*0	*0	*0
Social Scientist	*0	*0	*0	*0
Social Marketing	*0	*0	*0	*0
Health Educator	*0	*0	*0	*0
Journalist TV (50%)	*0	*0	*0	*0
Journalist Radio (50%)	*0	*0	*0	*0
Journalist Press (50%)	*0	*0	*0	*0
Artist (50%)	*0	*0	*0	*0
Midwife	*0	*0	*0	*0
Nurse	*0	*0	*0	*0
Typist	*0	*0	*0	*0
Administrator	*0	*0	*0	*0
Office Cleaner	*0	*0	*0	*0
Driver (50%)	*0	*0	*0	*0
SUBTOTAL	*0	*0	*0	*0

	1993	1994	1995	Total
Transportation				
Vehicle (SD100%)	*0	*0	*0	*0
Fuel	200	200	200	600
Maintenance	*0	*0	*0	*0
SUBTOTAL	200	200	200	600
Other Facilities				
Conference Room	*0	*0	*0	*0
5 working rooms	*0	*0	*0	*0
Lactation clinic office	*0	*0	*0	*0
Training Hall	*0	*0	*0	*0
Water and electricity	*0	*0	*0	*0
SUBTOTAL	*0	*0	*0	*0
Education and Training				
Curriculum development	2,000	1,000	800	3,800
Library books and materials	1,000	500	550	2,050
Slides	1,000	2,000	2,000	5,000
Workshop	15,000 (in kind)	15,000	10,000	40,000
National educators courses	20,000 (in kind)	20,000	10,000	50,000
Regional ("oblast") educator courses	-	7,140	7,850	14,990
Training support	-	8,000	8,800	16,800
Operation ("rayon" clinic) level courses	15,540	12,810	23,485	51,835
Administrators courses	10,000	-	-	10,000
SUBTOTAL	64,540	66,450	63,485	194,475
Other Information Exchange Media				
Local postage and communication	50	60	70	180
Newsletter	340	160	180	680
Radio messages	*0	*0	*0	*0
Scientific meeting	2,910	3,200	3,750	9,860
SUBTOTAL	3,300	3,420	4,000	10,720

	1993	1994	1995	Total
Clinical Services				
Model Hospital activities	676	1,490	2,460	4,626
In kind salaries	500	1,200	1,500	3,200
Model Hospital outreach activities	520	1,140	1,890	3,550
Clinical services	676	2,235	6,150	9,061
In kind salaries	500	1,500	4,500	6,500
Clinic's outreach activities	520	855	2,225	3,600
SUBTOTAL	3,392	8,420	18,725	30,537
Research				
General Research	4,500	6,000	8,000	18,500
Monitoring of Re-entry Programs	200	500	1,000	1,700
SUBTOTAL	4,700	6,500	9,000	20,200
Evaluation				
General Evaluation	-	-	10,000	10,000
Data Collection	1,000	1,000	2,000	4,000
Workshop	-	-	5,500	5,500
Technical Support	4,000	4,400	4,900	13,300
SUBTOTAL	5,000	5,400	22,400	32,800
SUBTOTAL OF DIRECT EXPENSE	125,985	91,931	119,188	337,104
Overhead (10% of Direct Costs)	12,599	9,193	11,919	33,710
TOTAL	138,584	101,124	131,107	370,814

NATIONAL TRAINING PLAN FOR CIS COUNTRIES.



A Lactation Management Center at the Dr. Jose Fabella Memorial Hospital Philippines

Dr. Rebecca M. Ramos
Dr. Marieta R. Siongco
Dr. Remedios T. David
Dr. Consolacion de Guzman
Dr. Evelyn Lopez del Castillo
Amelia P. Medina

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Introduction

Breastfeeding duration and incidence had declined in the Philippines over the past few years. Department of Health statistics indicate a decline in duration of breastfeeding from 12.3 months in 1973 to 9.6 months in 1983. The percentage of mothers initiating breastfeeding also has apparently declined from 89% in 1973 to 83% in 1983.

In response to worsening of trends, concerned groups began breastfeeding promotion in the early 1980's. The National Coalition for the Promotion of Breastfeeding, a coalition of non-governmental organizations was formed. In 1983, the Department of Health initiated the formation of a movement of both non-governmental and governmental organizations which became known as the National Movement for the Promotion of Breastfeeding (NMPB). The NMPB has been very active in the past few years working on activities such as drafting labor policies related to maternity leave and support for breastfeeding employees; development and distribution of pamphlets, posters, handbooks, television and radio audience; and development of promotional material for preparation of curricula on breastfeeding and support of breastfeeding research.

On October 20, 1986, the National Code of Marketing of Breastmilk Substitutes, Breastmilk Supplements, and other health care related products was signed into law. Included in the Code are provisions banning the use of the health care system for the promotion of infant formula and other related products; banning donations, samples, and other giveaways by milk companies to health workers and the general public; requiring special labels for infant formula; requiring intensified training of health workers; and regulating advertisements of all products covered by the Code. The penalties for violators of the Code are two months to one year imprisonment or a fine of not less than 1,000.00 or more than 30,000.00.

Since then, the Department of Health (DOH), with the assistance of the NMPB, has been actively involved in both code-related education and regulations. At the same time, the Department of Health (DOH) started working on the implementation of its rooming-in policy. It is worthwhile mentioning that in the early seventies, a committed government physician, Dr. Natividad Clavano, has already instituted a strong hospital-based breastfeeding program in Baguis City.

In June 1991, the World Health Organization (WHO) and UNICEF jointly launched a global effort, known as the Baby Friendly Hospital Initiative (BFHI), to accelerate the promotion and protection of breastfeeding. It is a major initiative to transform maternity facilities and hospitals worldwide into supportive environments where women will find more guidance and encouragement to initiate breastfeeding successfully. BFHI aims to protect the lives and future of millions of infants by making breastfeeding a universally supported practice in maternity facilities and hospitals around the world. It has received worldwide support from government leaders and health authorities.

In the Philippines, the DOH through its maternal and child Health Services has launched an aggressive BFHI program targeting all regional and provincial hospitals and medical centers in priority provinces to become Baby Friendly by 1992.

The Department of Health has created an advisory committee and task force for the BFHI. It is chaired by the Secretary of Health, with the DOH Undersecretaries for Hospitals and Facility Services and for Public Health Services; the UNICEF Representatives, WHO Country Representatives, Representatives from the Philippine Hospital Association, Philippine Pediatric Society and the Philippine Obstetrical and Gynecological Society as members.

Four hospitals were awarded Baby Friendly in the first-round assessment of hospitals conducted by the DOH and UNICEF using the global BFHI hospital assessment criteria in February 1992. These were: Davao Provincial Hospital, Baguio General Hospital, Quirino General Hospital and Jose Fabella Memorial Hospital. Jose Lingad Memorial Hospital and Eulogio Rodriguez Memorial Hospital were given certificates of commitment.

Assessment on the other provincial hospitals were done on June 10-20, 1992. Of the twenty one assessed hospitals, eighteen (18) were designated Baby Friendly Hospitals and three (3) hospitals received certificates of commitment. At present, there are now 25 designated Baby Friendly Hospitals in the country.

On June 2, 1992, Republic Act 7600, otherwise known as "Rooming In and Breastfeeding Act of 1992" was signed by former President Corazon Aquino. The state adopted room-in as a National Policy to encourage, protect, and support the practices of breastfeeding. It shall create an environment where basic physical, emotional and psychological needs of mothers and infants are fulfilled through the practice of rooming-in and breastfeeding.

In addition, the new administration of President Fidel V. Ramos declared its support for the Baby Friendly Hospital Initiative on July 31, 1992 and designated August 1-9 of each year as the "Mother and Baby Friendly Hospital Week." He expects to have 100 hospitals to be designated Baby Friendly before the year ends.

The office of the Maternal and Child Health Services of the DOH has been in continuous contact and collaboration with Jose Fabella Memorial Hospital in its aggressive program in the BFHI. Each seminar workshop was 40 hours with 3 hours of clinical exposure using a specific curriculum. The Trainers were mostly graduates of Wellstart International. The participants, consisting of teams of obstetricians, pediatricians and nurses or midwives, from the 14 regional hospitals were trained and in return, they were expected to be the master trainers of the Provincial Hospitals staff who would train those from the District level. At present, 30 training seminars have already been conducted by the DOH and Fabella Memorial Hospital.

While the national breastfeeding program has made some significant strides, still a lot has to be done. Training has been concentrated on the national level and it is taking a relatively long time to reach the grassroot level. The urban cities which are presently under local governments with the passage of the new Government code have not been involved in training activities. There is at best one major city per province which has its own Department of Health and responsible for the operation of local hospitals, health centers and lying ins. The National Capital Region alone, which includes metro Manila, has four cities and seventeen municipalities.

One reason for this is the fact that lactation Management has not been in integrated in the national curriculum of the nursing, midwifery, nor medical schools, neither is it emphasized in residency programs.

In a well documented research study undertaken by Emeline L. Verzosa on Infant Feeding Knowledge and Attitudes of 175 Metro Manila Health Professionals revealed that the majority had poor knowledge and ambivalent attitude toward breastfeeding. The study emphasizes the fact that information, education, and re-education programs are very crucial in the promotion and maintenance of breastfeeding not only for mothers, but more so for health professionals.

In addition, with the new mandate that the DOH is facing, more trained health personnel is needed to carry out its goal to support, protect and promote the breastfeeding program. Dr. Jose Fabella Memorial Hospital is in a position to help the national authorities as it is the only

tertiary government maternity and children's hospital in the country. It has a 700-bed capacity and has an average of 100 deliveries a day. The hospital contributed 35% (34,723) of the total deliveries in the National Capital Region (263,356) or 2% of the births in the country in 1989.

In 1981, it piloted the bedding in of healthy, full term babies in one postpartum ward with 60 patients. In 1984, this was extended to included mother ward of normal vaginal deliveries with healthy, low birth weight neonates above 2000 grams. Finally, in 1986, bedding in at the Cesarian Section Ward was innovatively added completing the transformation to a rooming-in hospital.

Activities start in the morning (8:30 a.m.) at the Out Patient Department with educational lectures and demonstrations for both prenatal and postpartum women, and mothers of pediatric patients. Various topics are tackled including breastfeeding. Since fifty five percent (55%) of admitted pregnant women do not have prenatal care at JFMH. Brief breastfeeding lectures are also giving in the Admission Room.

In the Labor Room, nurses, student midwives and nurse affiliates clean the mother's breasts and orient them on the policy of immediate bonding at the Delivery Room, for normal vaginal deliveries. Babies delivered by cesarian section are bedded with their mothers 4-6 hours after delivery. The hospital has a group of staff who motivates, assists in breastmilk expression and guides mother on proper breastfeeding techniques. They make up the "Lactation Brigade."

Other innovations introduced in the postpartum wards are the "Tandem Bed" concept, where two hospital beds are placed side by side for 3 reasons; for the safety of the babies being in the middle portion of the bed; for interaction purposes between a primi and a multipara; and in cases of shortage of beds, three or four mothers sometimes end up sharing two beds. At the foot rail of the beds colored paper star or half moon cut-outs are hung to signify the lactation performance of mothers. The "star" signifies that the mother is already lactating, while the "half moon" indicates that her baby is in the NICU. These symbols alert the Lactation Brigade to the particular need for assistance of the mothers. "No milk, no discharge" policy is being practiced, which means that mothers are not discharged if they are not lactating. Mothers, whose babies are at the NICU, are allowed to visit and feed their babies in the breastfeeding area within the NICU. They come any time they feel like cuddling or breastfeeding their neonates.

At the OPD, the Neonatal Clinic takes care of babies discharged from the NICU (problematic or premature) until they could be transferred to the Well Baby Section of the Under Five clinic.

Project Summary

In view of the passage of the "Rooming-in Law" which requires all hospitals - government and private - to institute rooming-in program to promote breastfeeding and to be certified as Baby Friendly (World Health Organization initiative), there is a need to train medical and paramedical personnel to be able to promote and support lactation. The Dr. Jose Fabella Memorial Hospital (JFMH), a government center for OB-Gyne and Pediatrics, and a training hospital in the same field, proposes to establish a National Lactation Management Center.

The Center will have its own core staff, but shall also utilize existing hospital staff trained in Lactation Management who have been conducting/coordinating training courses on a national and international scale. These courses will be reinforced and updated, a lactation library will be set up, as well as a data base through computerization of research findings and relevant studies which can be utilized nationally will be conducted.

Trainees will be composed of Training Teams from the health departments of local governments mostly in the urban areas, since these are the personnel not yet trained. Their set up has recently been devolved from the National Department of Health to the local governments under a new Local Government Code.

Training curricula for OB-Gyne and Pediatric Residents in the hospital will be redesigned to integrate Lactation Management. Likewise, coordination will be made with the Department of Education, Culture and Sports (DECS) to integrate Lactation Management in Nursing and Midwifery Curricula. Meetings and workshops are planned to implement this.

The Clinical component of the program will be strengthened by establishing a Lactation Clinic to counsel and manage women with breastfeeding problems and establish effective linkage with groups and agencies having the same goals. Lactation Amenorrhea Method will be promoted and support groups will be identified to assist in the follow up of breastfeeding mothers. Relevant promotional materials will be developed.

Research will be carried out and the Center will function as a data base for the National Program.

Budget for a 3 year project is included.

Goal:

To assist the National Government, specifically the Department of Health, in the promotion of breastfeeding and in the implementation of the Rooming-in Law.

General Objective:

To have a National Lactation Management Center functioning at the Dr. Jose Fabella Memorial Hospital by the first quarter of 1993.

Specific Objectives:

1. To have conducted 15 Training of Trainers Courses by the end of 1995.

2. To have fully integrated Lactation Management in the Training Program of Hospital Residents in OB-Gyne and Pediatrics by the first quarter of 1993.

3. To have collaborated with the Department of Education, Culture and Sports for the integration of Lactation Management in the National Nursing and Midwifery Curriculum by the end of 1995.

4. To establish a Lactation Clinic for referred and abnormal cases from the hospital's (JFMH) antenatal and postnatal clinics and those from Metro Manila.

5. To have produced educational brochures in breastfeeding for mothers which can eventually be used on a national scale.

6. To conduct researches in Breastfeeding and Lactation Management.

7. To strengthen and reinforce the existing Breastfeeding Program of the hospital.

Strategies:

1. Lactation Management Center

Dr. Jose Fabella Memorial Hospital is a recognized and accredited center for training, service and research in Obstetrics-Gynecology, Reproductive Health and Pediatrics. It is a referral center and considered a training arm of the Department of Health. It is also affiliated with a number of Medical and Nursing Schools. It operates a School of Midwifery. The Department of Health has recognized it as a Lactation Center, however, it needs a formal organizational structure for the purpose. It is thus proposed to formally set up a Lactation Management Center.

1.1 Organization and Staff

A Center Director will have overall responsibility for the project. This will be assumed by the Medical Director of the Dr. Jose Fabella Memorial Hospital who is a known advocate of Breastfeeding. He will provide the leadership and the necessary impetus to carry out the various activities of the Center. He will be assisted by a Deputy Director, who will be responsible for the administrative aspects and day to day activities of the center. The proposed Deputy is a Fellow of Wellstart. Three Master Trainers of Wellstart will be designated as Coordinators for Training, Service and Research (see Organization Chart). The Coordinators together with the Directors will promulgate/amend hospital policies, plan programs, provide guidelines and overall supervision. With the exception of the Project Director, the Coordinators will initially work on full time basis.

At present, there are no available offices nor Conference Rooms to formalize the existence of the Lactation Center. It is proposed that an office, a library, a conference room, a computer room, and a clinic for counselling and management be provided. The spaces are available, but need renovation. Furniture, office, audio-visual and clinic equipment, and a computer will be needed.

A Lactation Library has been started through books, journals and reprints received from Wellstart. These have to be increased and updated.

2. Training

2.1 Dr. Jose Fabella Memorial Hospital has been conducting Training Courses in Lactation Management for National Trainers. The present project plans to improve/upgrade the present curriculum which will have sessions on Training Process, Teaching Tools and Strategies, and a Training Plan as an output. The previous Training Course was heavy on knowledge and practice, but did not include sessions on Training.

This curriculum will be developed by the Training Coordinator together with the Center's other Master Trainers (8 in number) and those from other institutions based on the experience gained with the previous training courses.

2.2 Lactation Management will be fully integrated in the Training Programs of OB-Gyne and Pediatrics Residents. Department Heads (who are both Master Trainers) shall work with their respective consultants and the Training

Coordinator. This is envisioned to be operational by the end of the first quarter of 1993.

2.3 Training Courses:

The National Lactation Program has targeted Trainers from the Regional Medical Centers who in turn were expected to train Provincial Trainers. The Training Staff of local Health Departments are not yet included in this Training Plan. The local Health Departments are under the jurisdiction of the City mayors which are independent of the Department of Health. These local Health Departments operate local hospitals, lying-ins (birthing centers), health centers with field workers. The potential of these people to promote and protect breastfeeding is high. There is at least one city per province. Overall, there are 72 provinces. In the National Capital Region (NCR) which includes Manila (the country's capital), there are 4 cities and 17 municipalities with local Departments of Health. Trainees will initially come from NCR and other nearby regions. All regions are targeted.

Two week training courses will be held which will consist of didactic and practical phases. The Trainees will accomplish a survey form which would actually be a self assessment questionnaire on policies and practices on breastfeeding. This will later be used as evaluation forms.

Trainees will be required to come up with Training and Action Plans and asked to implement these plans in 4-6 months. The center faculty will follow up trainees and assist in the actual implementation of training programs. Only after the trainees have conducted their own training courses will they be given certificates of proficiency from the Dr. Jose Fabella Memorial Hospital.

Trainees will attend courses by teams of 3 with maximum of 15-21 participants per course. (Training Curriculum Annex.) A total of 15 training of trainers courses will be conducted in 3 years.

The Center will be available to other trainees both local and international. Proper coordination of schedule and funding are indispensable.

In service training or refresher courses for hospital staff will be regularly carried out.

3. Nursing and Midwifery Curricula

At present, Lactation Management is not included in the curricula of Nursing and Midwifery schools. Considering the future role and impact of these potential health workers, it is imperative that they be taught about breastfeeding and lactation early.

The Center will collaborate with the Department of Education, Culture and Sports (DECS) to initiate the integration of Lactation Management in the national curricula of Midwifery and Nursing Schools. Curriculum experts of these schools will be tapped to design a national curriculum; at the same time, the cooperation of these schools will be obtained through their respective associations like the Association of Midwifery Schools and the Association of Nursing Schools. Formal meetings and workshops will be organized to accomplish the coordination.

4. Lactation Clinic

Although the hospital has been promoting breastfeeding through educational lectures and counselling in the wards, the mothers who come back with problems are seen in the postnatal or well baby clinics. There is a need to establish a special clinic which will be manned by Lactation experts to encourage more women with problems to consult. Referrals from other centers/hospitals will also be handled.

A space in the Outpatient Department has already been identified but it needs to be renovated and equipped with furniture and clinical equipment like a breast pump to facilitate counselling and management of Lactation problems.

It is envisioned that the opening of this clinic will further encourage women to breastfeed as it will provide them with necessary follow up support and will be a demonstration of the importance the hospital gives to breastfeeding. Since it is in the Outpatient Department, other patients notably the antenatal patients will be attracted by the attendance of nursing mothers with their babies. This may boost the interest of potential mothers in this practice.

A Master Trainer will head this clinic. She will be supported by trained nurses/midwives.

The possibility of including support groups to assist in the clinic and/or to provide follow up support in the community will be explored and tried. Non-government organizations like BUNSO, a women's group strongly supporting and working for Breastfeeding will be tapped.

4.1 Lactation Amenorrhea Method (LAM) will be part of Postpartum Contraceptive offered by the Family Planning Center. Women will be taught this method and followed up.

5. Information Dissemination

At present, there are not enough materials on breastfeeding for mothers. The hospital, through its Family Planning Center has provided some comic books and flyers, but these are not enough. The Center will undertake the production of information brochures for mothers. The brochures will be in the local language and will inform on why, how to breastfeed, and common myths and problems will be explained.

6. Research

The Center will undertake research on Breastfeeding and Lactation. Among these will be:

6.1 Continuation rate of Breastfeeding among mothers at the Dr. Jose Fabella Memorial Hospital.

6.2 Nutritional Status of Lactating Women and Effect on Infant Weight.

The Center will collect data on Lactation for use of the National Program. A computer will be needed to carry out this activity. A statistician shall gather pertinent hospital and national data for use of the hospital and shall be available

and fed back to the National Program for information and utilization of National Policy makers and others.

Monitoring and Evaluation of Center Activities

It includes several components:

A. During the training courses:

1. Pre Test/Post Test: this will be used to evaluate the knowledge and skills acquired by the trainees during the course.

2. Health Facility Profiles: prior to training, the trainees will fill up a survey forms which will contain information on breastfeeding policies, practices, number of birthing centers, hospitals, health centers supervised. Profiles of these centers, like the number of staff, proportion trained in lactation, physical set-up of birthing centers and hospitals, presence of nursery, % of women breastfeeding on discharge and follow-up services offered related to mother and infant care will be included.

3. Training Plan: training teams will come up with training plans which would include course curriculum, session plans, teaching strategies and schedule of training which are supposed to be implemented 4-6 months after the course at JFMH.

4. Certificates of Proficiency: after the course, the Center's Trainers will follow up trainees who are supposed to conduct their own training courses within 4-6 months of training completion. Trainers will assist in the conduct of these training courses. Only upon compliance with these requirements will the trainees receive their Certificate of Proficiency from the center.

B. Knowledge, Attitude and Practices (KAP) for Hospital Resident Physicians: a KAP survey will be conducted on hospital resident physicians before and after the modification of their training curriculum.

C. Report of Activities: follow up will be done through monthly reports of activities and yearly accomplishment reports. At the end of the year, a survey form will be accomplished and compared with the pre-training questionnaire and determine changes in policies and programs to support breastfeeding.

D. Two years after the start of training, the center will conduct a survey in the National Capital Region (NCR) to determine the impact of the training programs, which shall include parameters like: Breastfeeding Rate - Exclusive and Partial Breastfeeding Duration, Infant Morbidity and Mortality, Perinatal Morbidity and Mortality, Incidence of Diarrhea, Facilities with Rooming-In, Number of Baby Friendly Hospitals, Percentage of Perinatal staff trained.

Other Indicators to be Used in Evaluating the Hospital

1. Average time of first breastfeeding after deliveries.

2. Number of mothers referred to lactation clinic.

3. Percentage of exclusive breastfeeding after 4 months.

4. Number of training courses conducted.

5. Percentage of perinatal staff trained.

6. Number of patients using LAM.

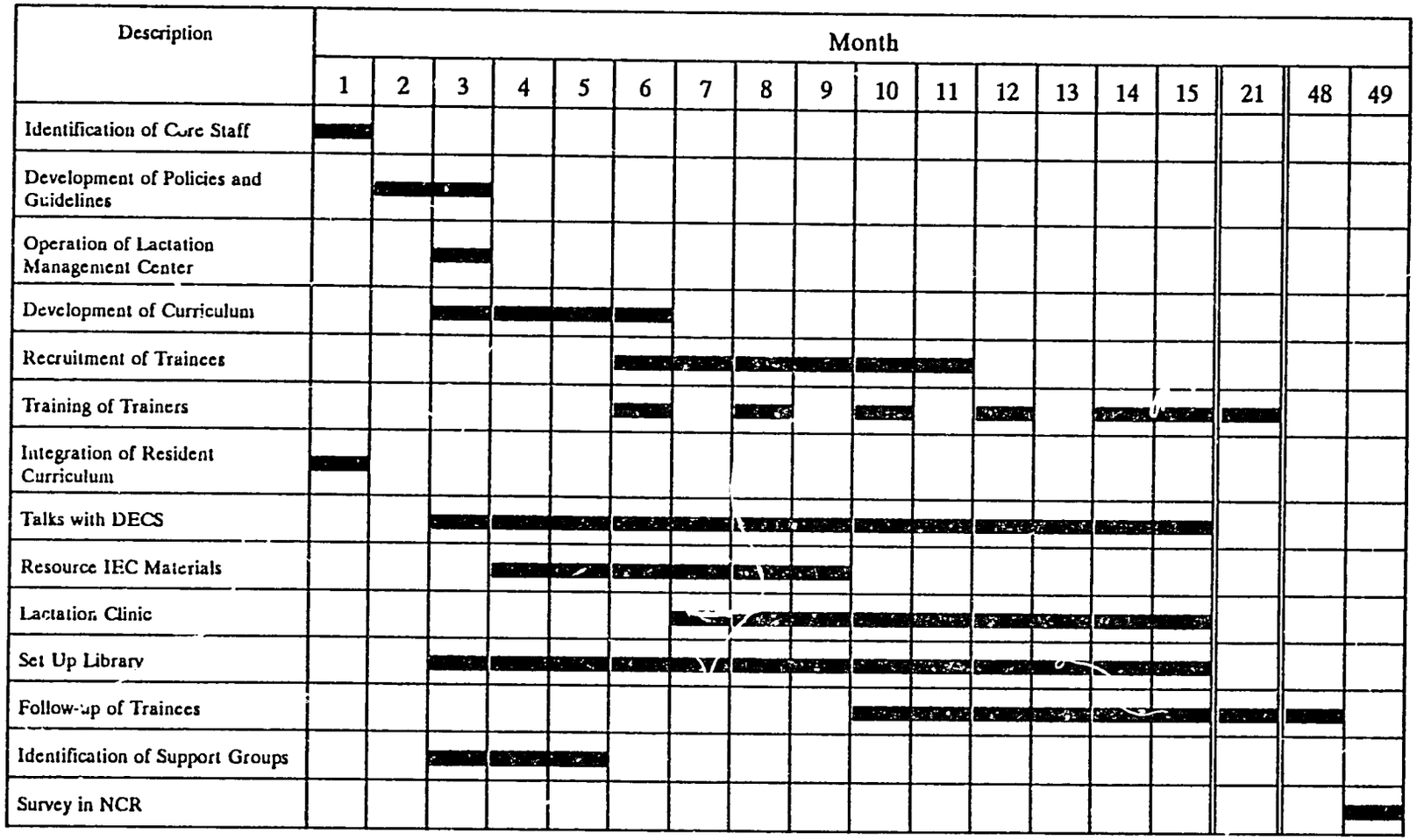
7. Degree of coordination with DECS on integrators of lactation management in national curriculum of midwifery and nursing schools.

8. Educational materials developed for trainers and mothers.

9. Linkage with support groups.

10. Research project completed.

TIMELINE


Description
Month
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Identification of Core Staff
Development of Policies and Guidelines
Operation of Lactation Management Center
Development of Curriculum
Recruitment of Trainees
Training of Trainers
Integration of Resident Curriculum
Talks with DECS
Resource IEC Materials
Lactation Clinic
Set Up Library
Follow-up of Trainees
Identification of Support Groups
Survey in NCR

Curriculum for Training of Trainers

General Objective: To improve the knowledge, attitude and skills of local health persons on lactation management and for effective dissemination to either health persons at Barangay level.

Specific Objectives:

After completion of training, the participants will be able to:

1. cite the national status and trends in breastfeeding.
2. enumerate the benefits of breastfeeding to the mother, infant, family and community.
3. discuss the human milk composition
4. explain the anatomy of the breast and physiology of lactation
5. conduct a successful antenatal breast examination
6. disseminate how to initiate breastfeeding
7. discuss management of early postpartum breastfeeding problems
8. discuss and manage infant problems related to breastfeeding
9. discuss the approach to prevention and management of maternal breastfeeding problems
10. suggest solutions to problem of mother and child separation
11. enumerate and discuss contraindications to lactation and breastfeeding
12. identify and train local support groups
13. cite the "National Code of Marketing of Breastmilk Substitutes" and the Rooming In and Breastfeeding Act of 1992
14. formulate breastfeeding policy
15. design a breastfeeding program for the community
16. conduct an effective and efficient training program
17. evaluate and monitor BF program

No. of participants:	21 (3 per team)
Venue:	National Lactation Center, JFMH, Manila
Duration of training:	10 working days (70 hours)
Faculty:	Graduates of Wellstart International
Training methodologies:	Lecture Discussion Role playing Teaching rounds (clinical experience) Presentation
Training Materials:	Slides Transparencies Videotape Flip charts Handouts Reference literature
Evaluation:	a. During training: i. Pre-test/Post-test ii. Observe participants, question-answer iii. Observe during practice (clinical experience) b. After training i. monthly report/annual report ii. Visit to the respective areas

Content and Activities:

1. Current situation and trends in BF

2. Benefits of BF
   - 2.1 benefits to infants
   - 2.2 benefits to mother
   - 2.3 benefits to family and community
   - 2.4 disadvantages of bottle feeding

3. Human milk components
   - 3.1 colostrum: pre-term milk, mature milk
   - 3.2 foremilk and hindmilk
   - 3.3 anti-infective factors
   - 3.4 difference between HM and cow's milk

4. Basic science
   - 4.1 Anatomy of the breast
   - 4.2 Physiology of lactation

5. Lactation management: antenatal period
   - 5.1 Psychological support/motivation for successful breastfeeding
   - 5.2 Breast and nipple examination/care
   - 5.3 Maternal nutrition

6. Lactation management: labor and immediate postpartum
   - 6.1 initiation of BF

- 6.2 latching on techniques
- 6.3 problems
  - 6.3.1 drugs (mother/infant) during the delivery period
  - 6.3.2 engorgement
  - 6.3.3 flat/inverted nipples
- 6.4 effect of continuous social support during labor

7. Lactation management: early and late infancy
   - 7.1 milk expression
   - 7.2 maternal problems
     - 7.2.1 mastitis/breast disease
     - 7.2.2 insufficient milk syndrome
     - 7.2.3 multiple births
     - 7.2.4 sick mothers
     - 7.2.5 mother and child separation/working mothers
     - 7.2.6 relactation/induced lactation
   - 7.3 infant problems
     - 7.3.1 reluctant nurser
     - 7.3.2 infant nutrition and weaning
     - 7.3.3 diarrheal disease control and BF
   - 7.4 breastfeeding, fertility, and child spacing
   - 7.5 mothers' support groups

8. Special problems
   - 8.1 premature/low birth weight
   - 8.2 kangaroo care method and application
   - 8.3 slow gaining babies
   - 8.4 sick babies
   - 8.5 asphyxia problems
   - 8.6 jaundice
   - 8.7 oral-motor dysfunction
   - 8.8 cleft lip/palate

9. Training the trainers
   - 9.1 effective training techniques
   - 9.2 teaching tools and strategies
   - 9.3 social marketing

10. Clinical experience
    - 10.1 standardized patients

11. National marketing of Milk Code
    Rooming In and Breastfeeding Act of 1992

12. Program planning and evaluation
    - 12.1 program planning workshops I and II
    - 12.2 Program presentation

13. Video presentations

HEALTH FACILITY PROFILE

Name of Hospital_____

Address_____

Position in the hospital of person completing this form

_____

Date_____

(Note: "Hospital" refers to Health Facility.)

1. Total no. of health center/lying-ins:

   City_____ Municipality_____

   1.1 No. of health facilities under your supervision:_____

   1.2 No. of health facilities in the city/municipality:____

   1.3 No. of health facilities you supervise:_____

   1.4 No. of health facilities with training in lactation:_____

   1.5 Total no. of maternity beds of the center/lying-in:_____ beds

2. Infant mortality of the previous year:_____

3. Estimate of distribution of socio-economic status of maternity patients: (based on an average monthly income).

   Upper Income (> $3,000/month) _____%

   Middle Income:

   Upper Middle ($1,000 - $3,000) _____%

   Lower Middle ($450 - $1,000) _____%

   Lower Income (< $450) _____%

4. Number of deliveries in 1988:

   No. of low birth weight infants _____

   No. of premature infnats (<37 weeks) _____

   No. of normal vaginal deliveries _____

   No. of caesarian section deliveries _____

5. What percent of patients who deliver in your hospital have prenatal care in your hospital?

_____ %

6. Do you give tetanus toxoid immunization at prenatal?

Yes /__/ No /__/

7. Are pregnant women informed about the benefits and management of breastfeeding by your hospital?

Yes /__/ No /__/

If so, by whom? _____

When? _____

8. How long do mothers on average stay in the hospital after delivery?

Vaginal delivery _____

Ceasarian section _____

9. What percent of deliveries are roomed-in?

Vaginal delivery _____%

Ceasarian section _____%

10. Reason(s) for not rooming-in:

_____

_____

11. How soon are babies roomed-in?

	Vaginal Delivery	C-Section
Immediately after delivery (within 30 minutes)	_____	_____
> 30 minutes to 4 hours	_____	_____
> 4 hours - 24 hours	_____	_____
> 24 hours	_____	_____

12. Reason(s) for delay of rooming-in after 30 minutes?

_____

_____

13. If rooming-in is available; are there times when babies are not with mothers?

Yes /__/ No /__/

If yes, what times (both day and night?) _____

How long? _____

Reasons? _____

_____

14. If there is no rooming-in, how do you promote breastfeeding?

Infant brought to mother's room only during feeding /__/

Mother goes to the nursery /__/

Specific place (BF room) /__/

Others, specify _____

15. While still in the hospital after the delivery, is the mother:

- shown how to breastfeed? Yes /__/ No /__/
- shown how to maintain lactation? even if she and her baby should be separated? Yes /__/ No /__/
- encouraged to breastfeed on demand? Yes /__/ No /__/

16. If information on breastfeeding is given, when is it provided?

/__/ during individual counseling sessions

/__/ during group classes

/__/ through distribution of IEC materials (please attach)

/__/ others _____

17. What is the first feeding that infants receive?

sterile water /__/

glucose water (D50) /__/

breastmilk /__/

formula /__/

others /__/ specify _____

Why? _____

18. Do breastfed infants receive any additional source of nutrition?

Yes /__/ No /__/

If yes, what is given?

water /__/

sugared water /__/

vitamins /__/

Others /__/ Specify _____

19. In your opinion, what food is best for the following infants:

Premature _____

Low Birth Weight _____

Sick baby _____

Normal baby _____

Infant with sick mother _____

20. If formula feeding is used, how is it given?

Feeding bottle /__/

Teaspoon /__/

Dropper /__/

Syringe /__/

Cup /__/

Gavage feeding /__/

Others /__/ Specify _____

21. Are breastfeeding infant given artificial teats or pacifiers while in the hospital?

Yes /__/ No /__/

22. For vaginal or C-Section deliveries:

	Type of Delivery	
	Vaginal	C-Section
% initiating breastfeeding	_____%	_____%
% breastfeeding <u>exclusively</u> at discharge	_____%	_____%
% breast and bottlefeeding ("mixed feeding") at discharge	_____%	_____%
% bottlefeeding <u>exclusively</u> at discharge	_____%	_____%
average length of hospital stay	_____%	_____%
How many hours (or days) old is the baby when first breastfeeding occurs?	_____%	_____%

23. What is your opinion about nursey care compared with rooming-in in the hospital from the following viewpoints:

	Nursery Care	Rooming-in
More economical	/__/	/__/
Needs less nursing personnel	/__/	/__/
Decreases risk of neonatal infection	/__/	/__/
Preferred by mothers	/__/	/__/
Promotes mother-infant bonding	/__/	/__/
Shortens hospital stay of mother and infant	/__/	/__/

24. Please list at least 3 most frequent situations for both mother and infant which are considered contraindications to breastfeeding in your hospital.

MOTHER _____

_____

_____

INFANT _____

_____

_____

25. What are the 2 most frequent breastfeeding problems which mothers and/or infants in your hospital seem to have?

Problem 1 : _____

_____

Problem 2: _____

_____

26. What % of patients who deliver in your hospital return for their post natal care?

_____%

27. Is any counseling on breastfeeding given to mothers after they have been discharged?

Yes /__/ No /__/

If yes, who makes the referral? To what groups are mothers referred?

_____

28. Does your hospital foster the establishment of breastfeeding support groups in any way?

Yes /__/ No /__/

If yes, how? _____

_____

29. Does your hospital have a written policy for protecting, promoting and supporting breastfeeding?

/__/ No Why not? _____

_____

_____

/__/ Yes (Please attach a copy of the policy.)

29.1 Are the policies communicated to those responsible for managing and providing maternity services? How?

/__/ Yes

Why? _____

_____

_____

/__/ No

Why not? _____

_____

29.2 Is there a mechanism for evaluating/monitoring the effectiveness of the breastfeeding policy?

Yes /__/ No /__/

If yes, how is this done? _____

_____

_____

30. Have members of the Perinatal Nursery staff of your hospital had formal training on lactation and BF management?

Yes /__/ No /__/

If yes, what percentage have been trained?

	PHYSICIANS	NURSES
< 25%	_____	_____
25 - 50%	_____	_____
51 - 75%	_____	_____
> 75%	_____	_____

	Training # 1	Training # 2	Training 3
Where?			
For how long?			
Who conducted?			
How many participants?			

31. What is your opinion on the following statements?

		AGREE	DISAGREE
31.1	Breastmilk is best but infant formula is a good substitute for breastmilk	/__/	/__/
31.2	Breastmilk can still be to low birth weight and premature infants even when they cannot suck	/__/	/__/
31.3	Sucking increases breastmilk supply so that "starter" infant formulas actually prevent breastmilk production and breastfeeding	/__/	/__/
31.4	Giving an artificial nipple to a newborn interferes with its ability to learn how to correctly suck from his mother's nipple	/__/	/__/
31.5	The Milk Code imposes restriction on physicians and deprives mothers of the freedom to choose the best milk for their babies.	/__/	/__/
31.6	Provision of milk formula samples to mothers before they leave the hospital is a good practice	/__/	/__/
31.7	A mother usually has no milk immediately after delivery so the infant should be given a bottle first so he will not go hungry	/__/	/__/
31.8	Mothers who delivered by C-section are not capable of breastfeeding for at least 1-2 days	/__/	/__/

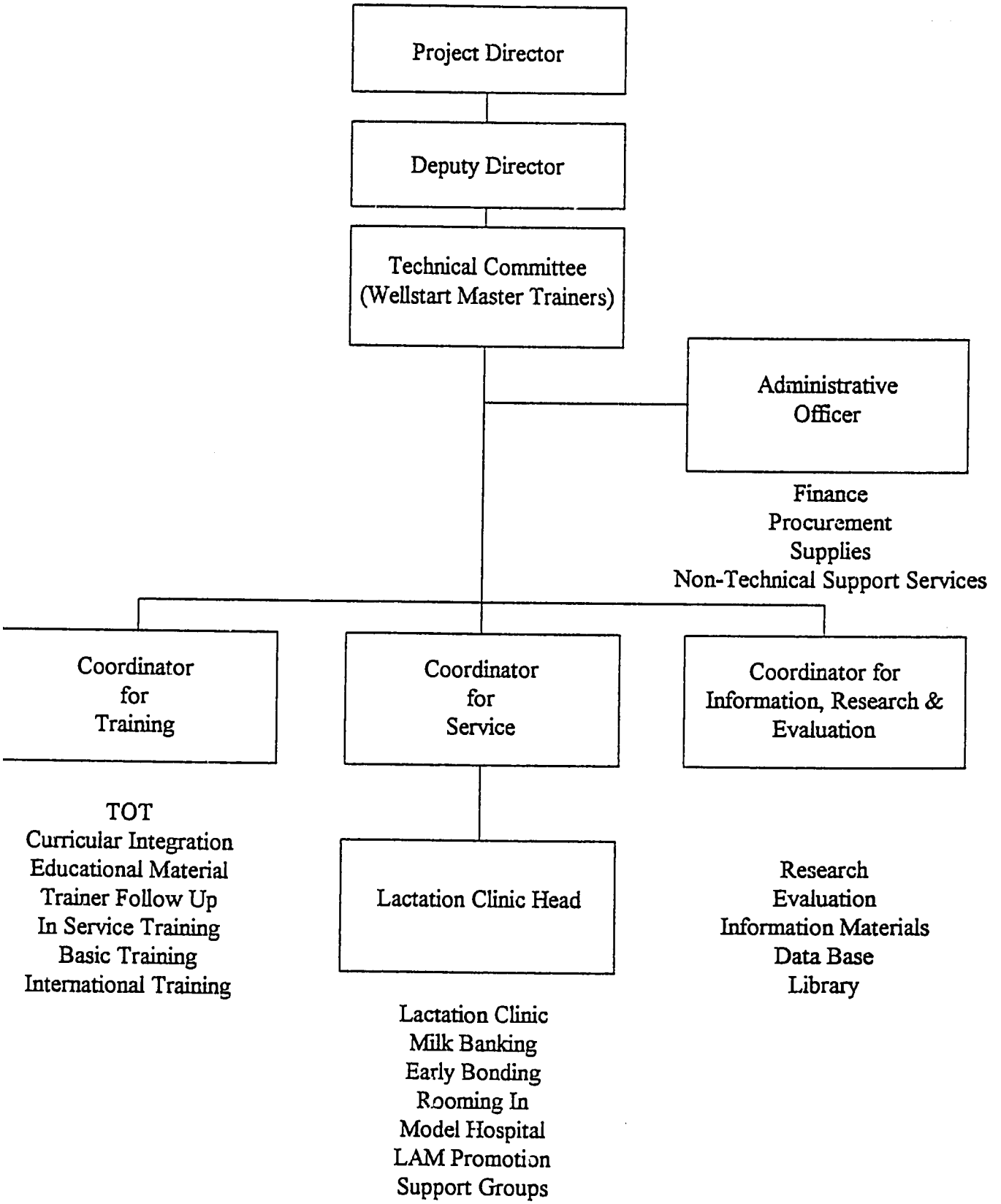
32. Would you be interested to attend a lactation management education class?

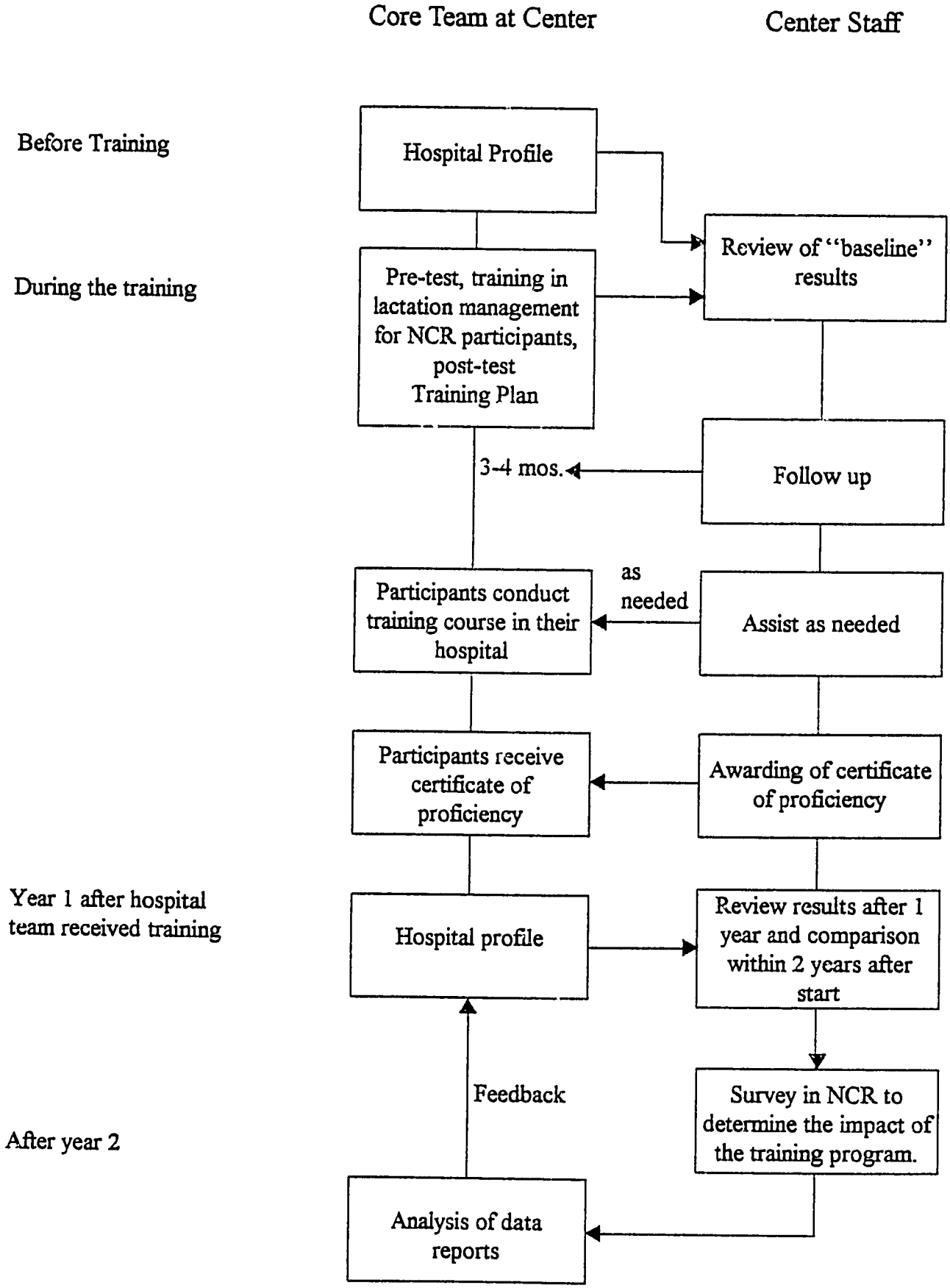
Yes /__/ No /__/

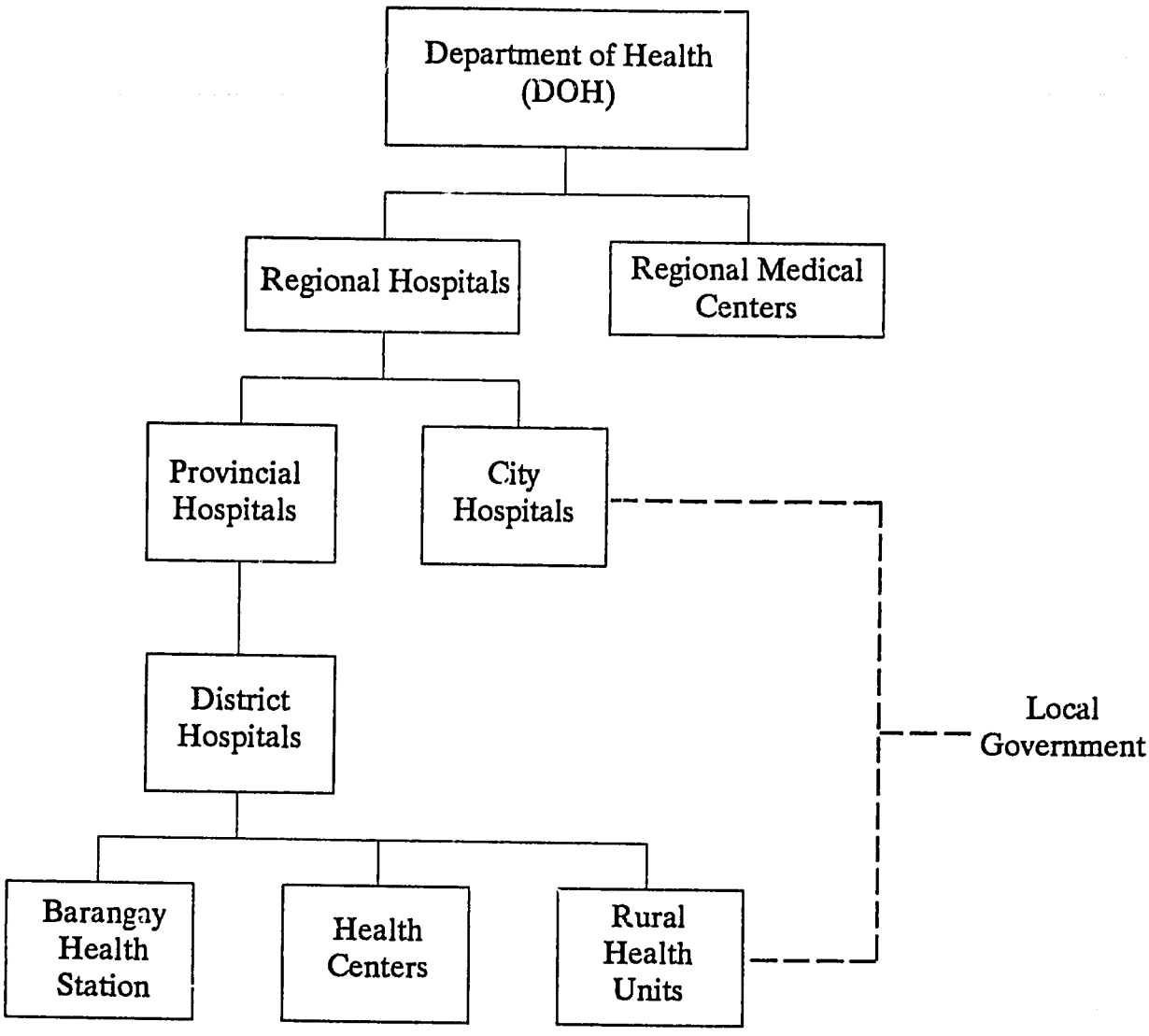
How many days are you available? _____

_____

Organization of Lactation Management Center




Core Team at Center
Center Staff
Before Training
Hospital Profile
During the training
Pre-test, training in lactation management for NCR participants, post-test
Training Plan
Review of "baseline" results
3-4 mos.
Follow up
as needed
Participants conduct training course in their hospital
Assist as needed
Participants receive certificate of proficiency
Awarding of certificate of proficiency
Year 1 after hospital team received training
Hospital profile
Review results after 1 year and comparison within 2 years after start
Feedback
Survey in NCR to determine the impact of the training program.
After year 2
Analysis of data reports


Department of Health (DOH)
Regional Hospitals
Regional Medical Centers
Provincial Hospitals
City Hospitals
District Hospitals
Local Government
Barangay Health Station
Health Centers
Rural Health Units

Exclusive Breastfeeding Program Plan for Manicaland Province Zimbabwe

Ancikaria Jane Chigumira - Dietician
Josephine E. Chikuse - Nurse Tutor
Dr. Callisto Tarukandirwa - Medical Office
Lucia Mutowo - Nutritionist

Presented September 4, 1992

Developed in cooperation with Wellstart as part of the Lactation Management Education Program funded by USAID's Office of Nutrition, DAN-5117-A-00-9099-00

A programme plan: To ensure exclusive breastfeeding by mothers delivering at Mutare Provincial Hospital and three government district hospitals during their stay in hospital and to continue doing so for four to six months.

Introduction

Manicaland covers a total area of 3.62 square km. i.e. 9.3% of the total land covered by Zimbabwe. It is situated along the eastern border of the country and is divided into seven districts.

- Buhera
- Chipinge
- Makoni
- Mutare
- Mutasa
- Nyanga

Total population	=	1,454,929
Total population - women of child bearing age	=	298,269
Total population 0-11 months	=	53,832
Total population 12-59 months	=	212,419

Rusape General Hospital caters for Makoni district and refers some complicated cases to Mutare Provincial Hospital or to Harare Central Hospital. Nyanga District Hospital caters for Nyanga District and Chipige district hospital caters for Chipinge district and both districts refer complicated cases to Mutare Provincial Hospital.

Breastfeeding in Manicaland Province is nearly universally accepted although the benefits of exclusive breastfeeding have not been fully realized and appreciated. (MCH Survey 1991 99.4% breastfed children in the Province).

Another survey done nationally 1986 confirms the fact that exclusive breastfeeding is not realized (54.7% babies weaned from 1-3 months).

There are a number of factors that contribute to this failure of mothers not exclusively breastfeeding whilst still in hospital. There is evidence that health workers have positive attitudes towards exclusive breastfeeding and have basic facts about it acquired from post basic course (1988 survey done to assess knowledge, practices and attitudes of 263 Zimbabwean health workers). Nevertheless they did not possess much of a practical knowledge and skills necessary to promote, initiate and support exclusive breastfeeding in hospitals. This clearly indicates that when the health workers is confronted with problems of initiating exclusive breastfeeding, he/she will have very little knowledge and expertise to support a mother who will need lots of help and encouragement from the health personnel. The uncertainty on the part of the health personnel regarding exclusive breastfeeding will result in other alternatives being opted for like formula supplements (1988 survey, 11% health workers opted for formula).

Hospital practices in the four hospitals also hinder initiating exclusive breastfeeding as early as one would like to do so. Babies of ill mothers and of C-section mothers have to be admitted into a nursery until the mother is in good condition to be able to handle the baby. This poses a threat to exclusive breastfeeding since there are no facilities or arrangements in the meantime of expressing milk from the mother for the baby.

Manpower shortage is another factor which enhances disruption of exclusive breastfeeding. Nurse-patient ratio in the labor wards is 1:3 and in the postnatal wards would be 1:15 which clearly explains that one nurse would not be able to successfully initiate exclusive breastfeeding with the load of work she has to accomplish on her own.

Overcrowding of our wards is also another factor as proved by Mutare Provincial Hospital Profile (Maternity beds-21, average bed occupancy-30). The other three government hospitals in Manicaland are not different from Mutare Provincial as far as manpower and infrastructure are concerned.

It is realized that it would not be an easy task to initiate exclusive breastfeeding in the four hospitals considering some of the negative factors mentioned earlier on. Mutare Provincial Hospital is a referral hospital for the province where "high" risk pregnant mothers are referred to for delivery (98% hospital profile) these include Pregnancy Induced Hypertension (PIH). Previous c/section, medical conditions e.g. diabetes mellitus, grand parity, multiple pregnancies and others.

It is the concern of the Wellstart team to establish exclusive breastfeeding at Mutare Provincial Hospital first, whilst training health personnel from the three district hospitals. It is hoped that when the relevant services personnel have been trained, they would in turn conduct on the job training sessions and seminars in their hospitals and disseminate the knowledge and skills acquired so that the four hospitals will have initiated exclusive breastfeeding by December 1993.

Problem

Practically all mothers delivering at the four government hospitals in Manicaland Province breastfeed their babies during their stay in hospital but breastfeeding is not exclusive.

Goal

To ensure that all babies born in the four hospitals are exclusively breastfed from birth until discharge from hospital and continue to at least four months to six months of age by December 1993.

Objectives

1. To sensitize the relevant policy makers within the Provincial Health Team on plans to be implemented, regarding exclusive breastfeeding by December 1992.

2. To produce educational material on exclusive breastfeeding for health personnel and mothers by April 1993.

3. To conduct in-service workshops for senior health staff in order to improve their knowledge, skills, and attitudes towards exclusive breastfeeding in the four mentioned hospital by April 1993.

4. To create community awareness, especially mothers, on the importance and management of exclusive breastfeeding during the first four months in the four catchment areas of the four mentioned hospitals, through campaigns, mass media and during antenatal and postnatal clinics by September 1993.

ORGANIZATION AND STAFF

Organization	*Staff*	*Roles*
1. Ministry of Health	Wellstart Associates	a) Convince policy makers at provincial level on the importance of our exclusive breastfeeding plan.
2. Ministry of Health	Wellstart Associates, Health Education Unit, Nutrition Unit	a) Produce posters, flip charts, leaflets, audio-visual aids and other training materials.
3. Ministry of Health	a) Wellstart Associates within the province and at head office	a) Training of trainers, Provincial Food Nutrition Management Team, doctors and senior nursing officers.
	b) Sisters in Charge, Community Sisters, Nurses in Charge	b) On the job training of junior ward staff; junior sisters, State certified Nurse I and II and Nurse Aids.
4. Ministry of Health, Ministry of National Affairs, Cooperatives and Job Creation, Ministry of Information	Community Sisters, Village Community workers, Ward community workers, District Nursing Officers, Health Education Unit, Zimbabwe Broadcasting Corporation, Maternity Unit Staff	Distributing leaflets, posters, verbal information, drama, radio and television broadcasts.

STRATEGIES AND ACTIVITIES

Objective	*Strategy*	*Activity*
1. To sensitize the relevant policy makers within the Provincial Health Team (PHE) on plans to be implemented, regarding exclusive breastfeeding by December 1992.	Convene one day meetings with the relevant policy makers in the province and the three districts.	a) Meet with Provincial Health Executive (PHE) and Mutare Provincial Hospital executive committee. b) Another meeting with District Health Executive (DHE) teams from the three districts and hospital executive members from the three government hospitals
2. To produce educational material on exclusive breastfeeding for health personnel and mothers by April 1993.	Formation of a working party involving the Wellstart associates, Health Education Unit and Nutrition department.	a) Produce about 200 flip charts for training sessions b) Produce 200 posters c) Produce about 500-1000 leaflets to be distributed to mothers
3. To embark on in-service workshops for senior health staff in order to improve their knowledge, skills and attitudes towards exclusive breastfeeding in the four mentioned hospitals by April 1993.	a) Plan training schedule for trainers of trainers. b) Conduct workshops for relevant health workers at the provincial hospital and the three district hospitals.	a) One day seminar for obstetricians, paediatricians, doctors, senior nursing officers (SNO), district nursing officers (DNO). b) Sisters-in-charge of wards, community sisters (maternity, paediatric and premature units). 3-day workshop. c) On-the-job training for junior staff: senior sisters, state certified nurses I and II.
4. To create community awareness especially among mothers on the importance and management of exclusive breastfeeding during the first four to six months of life in the four catchment areas of the four mentioned hospitals through campaigns and mass media and during antenatal and postnatal clinics by September 1993.	Inform community on the importance and management of exclusive breastfeeding.	a) Breastfeeding week awareness campaign in four districts during the first week of August 1993. b) Messages for mass media broadcast as an ongoing process beginning July 1993. c) Leaflets with information on exclusive breastfeeding should be distributed through hospitals to mothers in four districts beginning in June 1993, and should be an ongoing exercise.

MONITORING AND EVALUATION

Objective	*Monitoring and Evaluation*	*Indicators*
1. To sensitize the relevant policy makers within the Provincial Health Team (PHE) on plans to be implemented, regarding exclusive breastfeeding by December 1992.	a) Weekly meetings by ward and clinic staff to ensure that all mothers are breastfeeding exclusively post delivery (submit reports). b) Design a questionnaire to assess whether mother is exclusively breastfeeding just prior to discharge and monthly when they come for immunization and growth monitoring (till 6 months of age).	• Reports • Minutes • No. of mothers exclusively breastfeeding up to 6 months
2. To produce educational material on exclusive breastfeeding for health personnel and mothers by April, 1993.	Holding working party meetings fortnightly.	• Minutes • Quantity of material produced
3. To embark on in-service workshops for senior health staff in order to improve their knowledge, skills, and attitudes towards exclusive breastfeeding in the four mentioned hospitals by April, 1993.	Workshops for trainers of trainers	• No. of people attending workshops • No. of people having on-the-job training • Topics covered • Pre-test and Post-test • Workshop reports
4. To create community awareness among mothers on the importance and management of exclusive breastfeeding during the first four to six months of life in the four catchment areas of the four mentioned hospitals through campaigns and mass media during antenatal and postnatal clinics by September, 1993.	Holding preparatory meetings	• No. of campaigns • No. of meetings • No. of mass media messages

WORK PLAN

Activity/*Implementors*	1992			1993											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1. Meet with Provincial Health Executive (PHE) and Mutare Provincial Hospital Executive/*Wellstart Associates*															
2. Meet with District Health Executive (DHE) teams from the 3 districts and hospital executive members from the 3 government hospitals/*Wellstart Associates*															
3. Meet with the Education/*Material Production working party/Wellstart Associates*															
4. Production of educational materials/*Educational Material Production working group*															
5. Seminar for obstetricians, paediatricians, medical officers, senior nursing officers, (at the Provincial Health Team meeting) (1 day)/*Wellstart Associates*															

Activity/*Implementors*	1992			1993											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
6. Training of Trainers workshop (3 days)/ *Wellstart Associates*									■						
7. On job training for ward staff for the four government hospitals/*Sisters-In-Charge, Nurses-In-Charge, Wellstart Associates*									■	■	■				
8. Breastfeeding awareness campaign in the four district hospitals/*All staff from the four hospitals District Health Executive*											■				
9. Preparation of messages for mass media broadcast/*Wellstart Associates, Health Education Unit, Nutrition Department*									■						
10. Messages for mass media broadcast/*Zimbabwe Broadcasting Corp (ZBC), Manica Post, Health, Kwaedza, Nhau Dzemumakono*											▒	▒	▒	▒	▒
11. Distribution of Education/*Hospital staff, Wellstart Associates, Herald Education Unit, Nutrition Unit, Provincial Food Nutrition*									▒	▒	▒	▒	▒	▒	▒

BUDGET

Activity	No. of Participants	Inputs	Unit Cost	Total Cost (Z$)
1. Seminar for doctors, senior nursing officers and the PF&NMT	40	Meals	20.00	800.00
		Mileage (total 800 km to and from all 3 hospitals)	per km 2.00	1,600.00
		Travel and Subsistence	8.00	320.00
		Stationery	6.00	240.00
		Accommodation for 3 participants	120.00	360.00
			Subtotal	Z$3,920.00
2. Training of Trainers workshop - 3 days	40	Meals	20.00	4,000.00
		Mileage (total 800 km to and from all 3 hospitals)	per km 2.00	1,600.00
		T&S	8.00	960.00
		Stationery	20.00	800.00
		Accommodation	90.00	2,160.00
			Subtotal	Z$9,920.00

Activity	No. of Participants	Inputs	Unit Cost	Total Cost (Z$)
3. Production of educational material		Duplicating papers	40.00 5 reams	200.00
		Markers	2.00 4 boxes	100.00
		Ball points	1.00 1 box	50.00
		Flip charts	20.00 500	10,000.00
		Pencils/rubbers	2.00 1 box	200.00
		Manilla	5.00 200	1,000.00
		Printing expenses		15,000.00
			Subtotal	Z$26,550.00
4. Mass media campaigns		Newspapers	per column 12.00	180.00
		ZBC coverage	per minute 50.00	250.00
			Subtotal	Z$430.00
			GRAND TOTAL	Z$39,820.00

Budget Justification

1. **Mileage**

   Participants will use vehicles from their stations and mileage will be paid for by the programme vote according to government stipulated rates.

2. **Stationery**

   Stationery will be required for all training sessions as well as production of educational material.

3. **Food**

   Since most of the participants will be away from their normal working stations, food has been provided.

4. **Accommodation**

   Hotel accommodation will be provided for participants coming from out of Mutare.

5. **Travei and Subsistence**

   Participants will be given travel and subsistence allow at the rat of $8.00 for each overnight stay.

6. **Mass Media Publications**

   Pay for T.V. and newspaper breastfeeding messages.

EVALUATION TOOL
Form 1(A)

Mothers (on discharge from hospital)

1. a. Hospital:_____ b. District:_____

   c. Age:_____ d. Parity:_____

2. Antenatal Status

   a. Booked ☐ unbooked ☐ (please tick)

   b. Number of visits:_____

   c. Health education given Yes ☐ No ☐ (please tick)

   d. If yes, list topics covered:_____

   _____

   _____

3. Prenatal Period

   a. Duration of labour:_____

   b. Mode of delivery:_____

   c. How long after delivery was the baby given to you?_____

   d. What was the first feed given to the baby?_____

   e. If breast milk, when was the baby put to breast?_____

   f. If prelacteal feed was given:

      I. What was given:_____

      II. What was the reason for giving:_____

4. On Discharge

   a. Mother's lactation established: Yes ☐ No ☐

EVALUATION TOOL
Form 1(B)

Mothers (postnatal clinic)

a. District:_____

b. Hospital/clinic:_____

c. Date of delivery:_____

d. Baby's weight i. on discharge_____

ii. at six weeks_____

e. What is the child being fed on?_____

_____

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EVALUATION TOOL
Form 1(C)

Name:_____

Age:_____ Parity:_____

Hospital/Clinic:_____

Hospital of Delivery:_____

Birth weight:_____

Weight at age:

1 month:_____ 2 months:_____

3 months:_____ 4 months:_____

5 months:_____ 6 months:_____

What did you give the child yesterday?_____

(This form to be filled in when child attends immunisation clinic and monthly weighing.)

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APPENDIX 8

Advanced Study Fellow Research Proposal

Project Proposal
Topic: Impact of Maternal Nutritional Risk on Weight Gain of Exclusively Breastfed Infants Among Filipino Women

Dr. Jose Fabella Memorial Hospital
National Lactation Training Center

Dr. Ricardo B. Gonzales
Dr. Consolacion C. de Guzman

Introduction:

Breastfeeding had been a by-word since the Old Testament era, but with the evolution of the liberated woman, there was a significant shift to bottle feeding. However, because most studies recently seem to indicate that human milk obtained from well-nourished mothers is an ideal source of nutrients for the infants, breastmilk has regained the limelight. The nursing triad (the mother, her breastmilk and her infant) is now the focus of attention.

All women can breastfeed if they choose to do so, good maternal nutrition optimizes the quality and quantity of milk production while maintaining health of the mother. Maternal eating habits during both pregnancy and lactation have been observed over the past decade to determine its effect on the infant weight gain and growth. It is hypothesized that poor nutrition in the latter part of pregnancy affects fetal growth, whereas poor nutrition in the early months affects development of the embryo and its capacity to survive[32]. It has been demonstrated in humans that height and pre-pregnancy weight of the mother have independent and additive effects on the birth weights of the child. In an analysis of 4095 mothers in Aberdeen, Thomson, Bellewicz, and Hythen[30] found that, on the average, the tallest and heaviest mothers had babies who weighed 500 fm more at birth than babies of the shortest and lightest mothers. It is postulated that maternal size is a conditioning factor on the ultimate size of the placenta and thus controls the blood supply of nutrients that will be available to the fetus.

In Fabella Hospital, where low income mothers sought admission, observations of the many placenta of delivered babies showing small size of placenta in babies with low birth weight in conformity with the findings of Lechtig, et al[19]. He evaluated the socioeconomic status according to the family income, education and sanitary conditions in the home. Measurement if higher postpartum weight, skin folds and the ratio of nonessential to essential amino acids in serum all showed significant differences indicative of chronic protein malnutrition in the low socioeconomic group. The average weight of placentas from women in the low socioeconomic group was 15% below the average weight of placentas from the high socioeconomic group. Edwards, et al.[13] compared outcomes for women who entered pregnancy at 10% or below standard weight for height with those mothers who entered pregnancy at normal weight. The women were matched for age, case parity and socioeconomic status. Both the incidence of low birth weight and prematurity were significantly higher among the underweight mothers.

Underweight women were also subjected to different pregnancy complications. Anemia was encountered more frequently in the underweight group and those who were underweight anemic had an incidence of low birth weight (17%) compared with an incidence of 3.6% among women who were anemic but of normal weight.

Luke and Petrie[21] also assessed the relationship between infant birth weight and weight status of the mother. Results showed that in underweight women, mean infant birth weights increased 214 gm (7 oz) with each 10% increase in maternal postpartum weight. In normal weight subjects, the same increase in maternal postpartum weight paralleled an increase of 49 gm (1.20 oz) in infant birth weight. Among overweight mothers, a negative relationship was shown between increasing maternal postpartum weight and birth weight.

Breastmilk composition is of utmost importance for the development of the newborn infant. There is a pronounced demand for the essential nutrients to cover the requirement of rapid growth and maturation during the neonatal period, not to mention a reduced tolerance for deviations in food intake due to immaturity of the liver and kidney. The composition of a given milk sample is related not only to the amount secreted and the stage of lactation, but also to the

timing of its withdrawal and to individual variations among lactating mothers. These variations may be affected by such variables as maternal age, parity, health and social class. Except for vitamin and fat content, the composition of human milk appears to be largely dependent on the state of nutrition of mothers, at least until malnutrition becomes severe[20]. The major impact of maternal malnutrition on lactation is reduction in the total volume of milk produced. Reliable information on the volume of human milk produced is still scanty, mainly due to the fact that it is difficult or almost impossible to measure the daily milk production by manual or mechanical expression or test weighing of the baby itself. If feeding sessions have been frequent and of adequate duration, the milk supply is probably ample. Growth failure is the only true indication of inadequate nutrition in the normal breastfed infant. It is most frequently observed after the baby is 6 months of age; about this time some women find that their breastmilk alone does not provide sufficient nutrition to maintain optimum growth[2,6]. Although research has demonstrated that exclusive breastfeeding can be adequate for periods varying from 2 to 15 months and that there is no specific age at which breastfeeding becomes inadequate[25,27]. The most common cause of inappropriate milk production is overstimulation of the breast or use of drugs as sex steroids, thyrotropin-releasing hormones, theophyllines, amphetamines and tranquilizers. Excessive stimuli that may increase milk productions include frequent short nursings, sexual foreplay, clothing that rubs the nipple, frequent pumping and use of milk cups. Demand feedings have been shown to have beneficial effect on the milk supply, also reduce the incidence of engorgement, result in better weight gain by the infant.

For the exclusively breastfed infant, human milk is ordinarily a complete source of nutrients and a number of advantages have been defined for mothers and infants. Degree of advantage varies among infant pairs, since availability of alternative feeds, environmental conditions and life style characteristics are markedly different from one setting to another.

At the Dr. Jose Fabella Memorial Hospital, during the 1960's up to the early 1980's, babies were formula fed and there was a high incidence of diarrhea and respiratory infections that medical authorities shifted to rooming-in and started practicing breastfeeding on a pilot ward of 70 patients. The incidence of respiratory and gastrointestinal infections dropped abruptly so that eventually all mothers are exclusively breastfeeding.

Cunningham[10,11] provided the data that support the value of breastfeeding in reducing morbidity in infants from developed societies. This investigation reported significantly fewer illnesses in the first year of life among babies breastfed more than 4 ½ months. Among families of higher education, the bottle-fed group experienced two to three times as many illnesses as the breastfed group.

Saarinen[26] from Finland reported that breastfeeding appears to act as a prophylaxis for recurrent otitis media in Finnish infants. After observing 237 children during the first 3 years of life, he found otitis media to be strongly associated with early bottlefeeding. The recent study by Chen, Shunzhang, and Wan-Xian[6], strongly favors breastfeeding, especially for the prevention of or reduction in severity of respiratory infections.

Bottle-fed and breastfed infants follow similar growth curves from birth until the third or fourth month of age[3]. From the fourth month on, the bottle-fed infant gains weight at a faster rate, especially the sixth month of life[12,29].

The efficiency with which human milk is utilized for maintenance and growth by young infants has been demonstrated by Butte, et al[5]. Adequate growth was demonstrated by the infants, this was accomplished with energy and protein intake substantially less than that which is currently recommended.

Reduced risk of allergy is another beneficial effect of breastfeeding. Formula feeding as opposed to breastfeeding has been associated with increased susceptibility to food allergies[4,7,14,15,16,17,18,19,22,23,24,27]. However, studies by Udall, et al.[31,32] suggest that breastmilk may promote early closure of the mucosal barrier. In other studies, antibodies directed toward food components have been found in human milk and these may be involved in the prevention of allergies by hindering the intestinal absorption of infant immunogenic food proteins by the neonate[21,22].

Breastfeeding promotes strong emotional ties between mother and infant, thereby providing security and nourishment.

The Dr. Jose Fabella Memorial Hospital is a government tertiary charity hospital catering to the low income population of Metro Manila. It has an average of 100 deliveries a day. 98% of the patients fall below the poverty line. Some fathers are jobless or the earnings are not enough to supply the family, so lactating mothers work also. They are office workers, vendors or laundry women staying out of their house the whole day, leaving behind their infants in the care of the husband, relatives, or even with their elder children. Because they have to work, they are forced to shift to bottlefeeding. They mostly use condensed milk as a substitute because it is cheap and can be diluted to last for several days. They tend to choose less nutritive food because of the high cost of living and the large size of their families. Likewise, in some areas mothers are the last to eat, and they tend to consume only the leftovers.

While every measure toward promotion of breastfeeding is being done at the hospital, not much study has formally made to look into the different risk factors that mothers have during admission and how it affects their lactation performance. This study aims, therefore, to determine the impact of Maternal Nutritional Risk on weight gain and growth of exclusively breastfed infants.

Specific Objectives

1. To field test a protocol to identify lactating women who are at nutritional risk.
2. To collect and analyze the dietary data on lactating mothers.
3. To monitor infant weight gain during the first 4 months of exclusive breastfeeding.
4. To study the effect of poor maternal nutritional status as measured by infant growth during the first 4 months postpartum.

Methodology

A random sampling of 250 exclusively breastfeeding mothers of term infants ($\geq$ 37 weeks) delivered at the Dr. Jose Fabella Memorial Hospital will be the subject of this study. Maternal nutritional risk factors will be identified according to the anthropometric measures, biochemical and clinical factors, dietary consumption, and socio-economic factors.

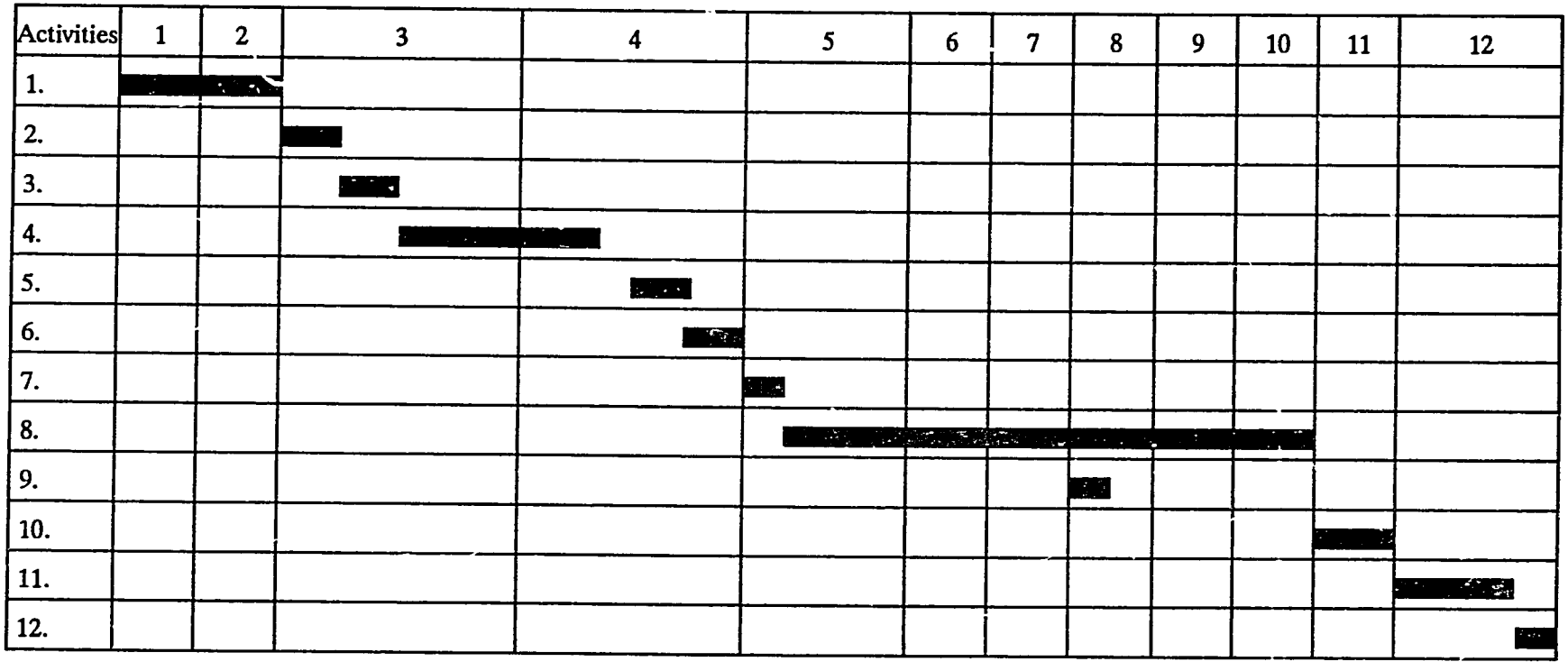
Maternal anthropometry will include pre-pregnant weight (immediately prior to delivery), postpartum weight (at 24 hours after delivery, and at 1, 2, 3 and 4 months postpartum). Hemoglobin, hematocint and UCV will be taken prior to delivery, at 24 hours after delivery and at subsequent visits at 1, 2, 3, and 4 months postpartum. Clinical history as to medical/obstetrical - previous or current, maternal age, parity and pregnancy interval will all be noted. Information on socioeconomic conditions like income, substance abuse, pica and psychological problems will be included in the questionnaire. A 24 hour dietary recall at monthly intervals during the first 4 months postpartum will be completed by a trained nutritionist on each subject. The nutritionist

will evaluate the adequacy of food consumption based on the Daily Food Guide for the Philippines.

Infant data will include sex, weight in grams, length in centimeters, chest and head circumference in centimeters, Hgb, HCT and MCV immediately following birth with subsequent visits at monthly intervals up to 4 months will include the weight in grams, length in centimeters chest and head circumference in centimeters, Hgb hemato count and MCV will only be evaluated at the 4 month visit. Immunization will be given to babies as indicated. All mothers are exclusively breastfeeding. Information and techniques on successful breastfeeding will be offered to the mothers while in the hospital and in subsequent visits if problems arise.

Discontinuance of breastfeeding, whether temporary or permanent, will eliminate the subject from the study. Likewise, babies with congenital abnormalities or medical problems will be excluded. All mothers will be given specific dates of followup at the out-patient department and will be assessed by the same obstetrician, pediatrician and nutritionist with a research assistant who is in charge of all data collected. Statistical analysis will be carried out by a trained statistician and in collaboration with the nutrition center of the Philippines.

TIME LINE



WORKPLAN

1.	Finalize research proposal and literature review	2 months
2.	Clearance from the Director of Hospital	1 week
3.	Clearance from the Research and Ethics Committee	1 week
4.	Clearance from the Funding Agency	1 month
5.	Training of the research team, which will include an obstetrician, nutritionist, statistician consultant and research assistant	2 months
6.	Pretesting	1 week
7.	Analysis of the pretest	1 week
8.	Collection of data	5 ¾ months
9.	Preliminary analysis of data collected during the first 3 months	
10.	Complete data analysis	1 month
11.	Finalization of report	3 weeks
12.	Discussion with the administration	1 week

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MATERNAL CHART

Date:_____ File No:_____ Study No.:_____

Name

Address

Husband's name Occupation

Age Status Height

GR____ P_____ (_____) Date delivered_____

Pre pregnancy weight (kilos)_____ Desirable weight_____ % Desirable weight_____

Term weight (kilos)_____ Desirable weight_____ % Desirable weight_____

Total pregnancy gain (kilos)_____ Recommended weight gain_____

Postpartum weight (24 hours after delivery) kilos_____

Date

_____ 1st visit _____ 3rd visit

_____ 2nd visit _____ 4th visit

Laboratory results:

Date HEB _____

_____ 24 hours after delivery _____ 2nd visit _____ 4th visit

_____ 1st visit _____ 3rd visit

MATERNAL HISTORY

1. Are you allergic to any medication? ☐ Yes ☐ No (if yes, please list)

_____

2. Have you ever had any of the following? Please check (✔) all that apply.

☐ Abnormal pap smear
☐ Allergy/asthma
☐ Cancer
☐ Constipation/hemorrhoids
☐ Surgery (what if any)
☐ Diabetes
☐ Diarrhea (chronic)
☐ Heart disease
☐ Hypertension
☐ Kidney/bladder infection
☐ Liver disease
☐ Thyroid disorders
☐ Tuberculosis
☐ Venereal disease
☐ Depressions
☐ Other

3. Have you ever had any of the following problems or procedures related to your breasts? Please check (✔) all that apply.

☐ Biopsy
☐ Lumps
☐ Nipple problems:_____
☐ Surgery:_____
☐ None

4. Have you had any of the following related to a previous pregnancy? Please check (✔) all that apply.

☐ No previous pregnancy
☐ Cesarean delivery
☐ Excessive bleeding during/after delivery
☐ Infant death
☐ Infant weighing less than 5 ½ pounds (2500 gms)
☐ Infant weighing more than 8 pounds (4000 gms)
☐ Infant with medical problems
☐ Miscarriage
☐ Premature infant
☐ Twins/triplets
☐ Others

5. Are you taking the following medications? Please check (✔) all that apply.

☐ Prenatal vitamin-mineral
☐ Iron
☐ Diet pills
☐ Antihistamines/cold remedies
☐ Laxatives/antacids
☐ Diuretic/water pills
☐ Aspirin/pain pills
☐ Birth control pills
☐ Antibiotics
☐ None of the above
☐ Others_____

6. Did you have any of the following during this pregnancy. Please check (✔) all that apply.

☐ Anemia (low iron level)
☐ Fever
☐ Gestational diabetes
☐ High blood pressure
☐ Premature labor
☐ Urinary tract infection
☐ Medication
☐ None of the above
☐ Other_____

7. Did you have any of the following during this labor and delivery?

☐ Fever
☐ Heriorrhal
☐ Drugs to speed labor
☐ Drugs to control pain
☐ Drugs to control HDN
☐ Antibiotics
☐ Premature rupture of membranes
☐ None of the above
☐ Other_____

8. Delivery was by:

☐ Vaginal (normal)
☐ Vaginal (breech
☐ Forceps
☐ Cesarean
☐ Indication for abnormal delivery
_____

9. Did the baby have any of the following shortly after birth?

☐ Breathing problems
☐ Fever
☐ Medications
☐ High hematocrit
☐ Jaundice
☐ Other_____
☐ Low blood sugar
☐ Meconium aspiration
☐ None

10. How soon after delivery did you nurse your baby?_____

11. Were you and your baby separated for more than 2 hours while in the hospital? Yes ☐ No ☐

12. While in the hospital, how many times in 24 hours did you breastfeed your baby?

☐ Less than 8 times ☐ 8-12 times (every 2-3 hours) ☐ More than 12 times

13. What was the longest time between breastfeeding? Day:_____ Night:_____

14. Did you have any of the following problems with your breasts or with breastfeeding your baby while in the hospital?

☐ Attachment difficulties ☐ Sleepy baby ☐ Preference for one breast

☐ Engorgement ☐ Sore nipples ☐ Not enough milk

☐ Other

15. While in the hospital, was your baby given the following supplements?

☐ Formula ☐ Water (plain) ☐ Sugar water

If so, how were supplements given? ☐ Bottle ☐ Syringe ☐ Dropper ☐ Other

16. Was your baby given a pacifier? ☐ Yes ☐ No

17. Did you and your baby go home at the same time? ☐ Yes ☐ No

18. How old was the baby at discharge?_____

19. Are you currently having vaginal discharge? ☐ Yes ☐ No

Has your menstrual period returned? ☐ Yes ☐ No LMP_____

20. Which of the following family planning methods are you using or do you plan to use?

☐ Birth control pills ☐ Other_____ ☐ None

FEEDING HISTORY

21. How many times in 24 hours are you currently breastfeeding your baby?

☐ Less than 8 times ☐ 8-12 times (every 2-3 hours) ☐ More than 12 times

22. What is the longest time between breastfeeding? Day:_____ Night:_____

23. How long does your baby nurse on each breast?_____

24. While nursing, do you sense any of the following in your breasts?

☐ Filling ☐ Burning ☐ Milk dripping from other breast

☐ Tingling ☐ Emptying ☐ None

☐ Other_____

25. Who decides when the feeding is over? ☐ Mother ☐ Baby

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26. At home, has your baby received:

☐ Water ☐ Formula ☐ Liquids, other than formula ☐ Any solids

27. How many times in 24 hours has your baby had: Wet diapers_____ Bowel movements_____

28. Does your baby spit up? ☐ Never ☐ Occasionally ☐ Often

29. Is the baby content or sleeping between feedings? ☐ Never ☐ Occasionally ☐ Often

30. Has your baby had any prolonged crying spells? ☐ Never ☐ Occasionally ☐ Often

31. Is your baby given a pacifier? ☐ Never ☐ Occasionally ☐ Often

32. Have you had any of the following problems with your breasts or with breastfeeding since coming home?

☐ Baby always hungry ☐ Cracked/bleeding nipples ☐ Painfully full breast(s)

☐ Baby prefers one breast ☐ Nipple pain ☐ Not enough milk

☐ Baby not interested ☐ Breast pan ☐ None of the above

33. Have you used any of the following?

☐ Hand expression ☐ Breast or nipple shield ☐ None

☐ Breast pump ☐ Nursing bra (with underwire)

☐ Breast cream ☐ Nursing bra (without underwire)

34. Your bra size: Before pregnancy_____ Now_____

FAMILY HISTORY

35. Does anyone on either side of the baby's family have any of the following?

☐ Asthma ☐ Food allergies ☐ Other

☐ Eczema ☐ Diabetes

☐ Thyroid disorder ☐ None of the above

36. How are members of your family adjusting to the new baby?

☐ Very well ☐ Reasonably well ☐ Poorly ☐ Very poorly

37. Was your baby planned? ☐ Yes ☐ No

38. When did you decide to breastfeed this baby?

☐ Before pregnancy ☐ During pregnancy ☐ After delivery

39. How did you prepare for breastfeeding?

☐ Classes ☐ Reading ☐ Other_____

40. Were you breastfed? ☐ Yes ☐ No ☐ Not known

41. Was the baby's father breastfed? ☐ Yes ☐ No ☐ Not known

42. Have you breastfed a previous baby? ☐ Yes ☐ No

If yes, for how long?_____ Why did you stop?_____

43. Why do you wish to breastfeed your baby?_____

44. Is there anyone in your household/family who feels you should not breastfeed this baby? ☐ Yes ☐ No

45. For how long do you plan to breastfeed this baby?_____

46. Why do you think you will discontinue breastfeeding at that time?_____

47. What was the highest grade or year of regular school you have completed?

☐ Less than 6 years ☐ High school (10 years) ☐ 4 year college

☐ Elementary school (6 years) ☐ 2-year college ☐ Graduate school

48. Usual occupation? Mother:_____ Father:_____

When does mother plan to work?_____

49. Did you see a nutritionist during your pregnancy? ☐ Yes ☐ No

50. Are there any foods that you avoid eating? ☐ Yes ☐ No

If yes, what?_____ Why?_____

51. Are you now on any of these special diets?

☐ Diabetic ☐ Low salt ☐ High protein

☐ Low fat ☐ Weight loss ☐ No special diet

If yes, who suggested the diet?_____ ☐ Other_____

52. Are you trying to lose weight at this time? ☐ Yes ☐ No

If yes, how much?_____ How? ☐ Less food/more exercise ☐ Program ☐ Other

53. Are you a vegetarian? ☐ Yes ☐ No

If yes, do you consume? ☐ Milk products (milk, cheese, yogurt) ☐ Eggs

54. How would you rate your appetite presently? ☐ Good ☐ Fair ☐ Poor

55. How would you describe the amount of food in your household?

☐ Enough, of the kind you like ☐ Sometimes not enough

☐ Enough, but not always the kind you want ☐ None of the above

56. Do you have someone to help you shop and prepare meals? ☐ Yes ☐ No

57. How many times a day do you eat meals?_____ Snacks?_____

58. How many cups (8 ounces) of the following liquids do you usually drink per day?

_____	Water	_____	Sodas with water	_____	Coffee
_____	Juice	_____	Diet soda, diet punch	_____	Tea
_____	Milk	_____	Punch, Kool Aid, Tang	_____	Other_____

LIFESTYLE

59. How often are you now drinking beer, wine, hard liquor or mixed drinks?

☐ Daily ☐ Weekly ☐ Monthly ☐ Never

When you drink, how many drinks do you have? ☐ One ☐ Two ☐ Three ☐ More

60. How many cigarettes do you smoke each day?

☐ Do not smoke ☐ Fewer than 10 cigarettes ☐ 11-20 cigarettes ☐ More than 20 cigarettes

61. How often are you currently exercising (besides housework, child care)?_____

What types of exercise do you do?_____

62. Do you feel you are getting adequate rest? ☐ Never ☐ Occasionally ☐ Often

63. Having a new baby can be a stressful time for the family. What other stresses are present in your home?

☐ Relationship difficulties	☐ Moving	☐ Illness in the family
☐ Lack of help with home/child care	☐ Financial concerns	☐ Death in the family
☐ Drug or alcohol use	☐ Other_____	

64. Who lives with you in your home?_____

65. Do you have any other concerns about yourself, your baby, or your family's health that you would like to discuss during your appointment. ☐ Yes ☐ No

If yes, what?_____

_____

MOTHER DEMOGRAPHIC DATA DE-CODER

Marital Status

1 single
2 married
3 divorced
4 separated
5 widowed
6 other

Planned Pregnancy

1 yes
2 no
3 unsure (+/- or "sort of")

Feeding Method

1 exclusive breastfeeding
2 mixed feeding
3 bottlefeeding

Education

0 none
1 elementary school
2 high school
3 two-year college
4 four-year college
5 graduate school

Income

1 P 0-500
2 P 501-1000
3 P 1001-1500
4 P 1501-2000
5 P 2001-2500
6 P 2501-3000
7 P 3001-3500
8 P 3501-4000
9 P 4001-4500
10 P 4501-+

Average Weekly Food Budget

1 P 0-100
2 P 101-200
3 P 201-300
4 P 301-400
5 P 401-+

Risk Factors

1 adolescence
2 high parity
3 short inter-pregnancy interval
4 fad diet/pica/psych. complications
5 hypovolemia (only before intervention)
105 hypovolemia (only after intervention)
205 hypovolemia (before/after intervention)
6 overweight
7 previous OB complications (unlikely related to nutrition - SAV, ectopic, tubal, placenta, previa, abruptio placenta)
107 previous OB complications (both 7 and 107)
8 medical complications (only before intervention)
108 medical complications (only after intervention)
208 medical complications (before/after intervention)
9 excess smoking, alcohol, drugs
10 low income
12 low prepregnancy weight
13 insuff. weight gain (only before intervention)
113 insuff. weight gain (only after intervention)
213 insuff. weight gain (before/after intervention)
14 anemia (only before intervention)
114 anemia (only after intervention)
214 anemia (before/after intervention)
17 adolescence (early)
18 very overweight
19 short stature

Intercurrent Illnesses

1 UTI (urinary tract infection)
2 URI (upper respiratory infection)
3 GI flu syndrome
4 VD (GC, syphilis, herpes)
5 vaginal infection
6 other

Prenatal or Other Vitamin Supplements

0 no
1 yes

Mineral Supplements

0 no
1 unspecified
2 Fe only
3 Ca only
4 Mg only
5 Fe + Ca
6 Fe + Mg
7 Ca + Mg
8 other combin (not Ca)

Confounding Variables

1 other drugs known to affect the fetus
2 street drug abuse (unspecified)
3 cocaine/crack/amphetamines

4 cigarette abuse (unspecified > 10/day)
40 cigs 1-5/day
41 cigs 6-10/day
42 cigs 11-15/day
43 cigs 16-20/day
44 cigs 21-25/day
45 cigs 26-30/day
46 cigs 31+/day

5 alcohol abuse
6 diabetes (pre-existing and gest.)
7 hypertension (pre-existing and gest.)
8 cancer
9 renal disease
10 anesthesia/surgery/trauma during preg.
11 X-ray exposure
12 GI parasites/malabsorption syndrome
13 fibroid uterus/malformed uterus
14 incompetent cervix
15 multiplicity
16 severe infection (like pyelonephritis or hepatitis)
17 hemoglobinopathies
18 cardiopulmonary disease (NYHA Class 2 or greater)
19 thyroid disease

MOTHER DEMOGRAPHIC DATA

1 Last Name First Name

2 Hospital Number Study Number Birthdate

3 Marital Status Planned Preg. Feeding Method Educ. Income # in Household Avg. Wk. Food $ Insurance

4 Height (cm) Pre-Preg. Wt. (kg) % Ideal Wt. Age Gravida Parity

5 Risk Factors

6 Confounding Variables

7 Intercurrent Illnesses

8 Prenatal Supplements

9 Date of Delivery

10 Date of Visit(s)

11 Visit Hb Hct MCV

Visit Hb Hct MCV

PREVIOUS PREGNANCY HISTORY

Gravida Mature Premat. TAB SAB Parity Living

Date	Place	Weeks Gestation	Birth Weight	Sex	Birth Complic.	Present Condition

MEDICAL HISTORY

	PH	FH
Allergy/Asthma		
Autoimmune		
Cancer		
Cardiovas. Dis.		
Cervical Dyspl.		
Cong. Anom.		
Diabetes		
GI Disorder		
Hypertension		
Mental Illness		
Multi-Birth		
UTI		
TB		
VD		
Others		

SUPPLEMENTS PRENATAL

Vitamin

Mineral

Others

NUTRITIONAL RISK FACTORS

Adolescence		Low Income	
High Parity		Diet	
Short Inter-Preg. Interval		Low Pre-Preg. Weight	
Fad/Pica/Psch Comp.		Insufficien t Weight Gain	
Hypovolemia		Anemia (mild)	
Overweight		Anemia (mod.)	
Prev. Obstet. Complication		Anemia (severe)	
Medical Complications		Adolescence (early)	
Substance Abuse		Very Overweight	
		Short Stature	

SOCIO-ECONOMIC DATA

Marital Status		Monthly Income	
Planned Pregnancy		Wkly Food Budget	
Feeding Method		Number in Household	
Race		Medi-Cal	
Preferred Language		Food Stamps	
Live with Parents		WIC	
Live with Baby's Father		Welfare/ AFDC	
Education		Other Assistance	

Patient's Occup.

Partner's Occup.

INTERCURRENT ILLNESS

Illness	Start	End	Med Hx	Pt Hx

NUTRITION STUDY INFORMATION

Source Date

Study Number

ANTHROPOMETRIC DATA (MOTHER)

	Current	Ideal	% Ideal
Height			
Pre-Preg. Weight			

Confounding Variable

Reason:

DIETARY INTAKE

DO NOT WRITE IN THIS SPACE

INTAKE SUMMARY

Name	Age	Height	Weight

TIME	PLACE	AMOUNT	FOODS EATEN	Animal protein	Veg. protein	Milk products	Breads/cereals/grains	Vit. C frt./veg.	Vit. A frt./veg.	Other fruits/veg.	Fats/sweets/other foods

INFLUENCES ON DIET, COMMENTS, AND FOLLOW-UP

SUMMARY

Servings eaten

Servings needed

Difference

Condition/diagnosis	Visit no.	Weeks gestation	Date	Interviewer

NUTRITIONAL ASSESSMENT FOR BREASTFEEDING WOMEN

Name_____ Date_____

File #_____ Study Case #_____

Delivery date_____ Wks/months postpartum_____

COMMENTS:

BREASTFEEDING DEFINITION

Full: ☐ Exclusive (no other liquid or solid given to the infant)
☐ Almost exclusive (vitamins, water, juice, given not more than once per day, not more than 1-2 swallows)

Partial: ☐ High (>80% of feeds)
☐ Medium (79-21% of feeds)
☐ Low (<20% of feeds)

Token: ☐ (Breastfeeding episodes have insignificant caloric contribution)

LABORATORY OBSERVATIONS

TEST	Mother		Infant	
	Date	Date	Date	Date
Hemoglobin (g/dL)				
Hematocrit (%)				
MCV (μ^3 or fL)				
Cervical cytology			N/A	N/A

MATERNAL DIETARY ASSESSMENT Daily average from __days:

Food Group	Minimum Amt./Serv.	Amt./Serv. Eaten	Sugg. Change
Animal protein	6 oz.		
Vegetable protein	1		
Milk products	3		
Breads/cereals/grains	7		
Vitamin C-rich frt./veg.	1		
Vitamin A-rich frt./veg.	1		
Other fruit/veg.	3		
Unsaturated fats	3		

Excessive: ☐ Fat ☐ Sugar ☐ Salt ☐ Caffeine

MATERNAL NUTRITIONAL RISK FACTORS

☐ Very overweight	☐ Prev. obstet. complications	☐ Low income
☐ Underweight	☐ Adolescence	☐ Substance abuse
☐ Inadequate weight gain	☐ High parity	☐ Pica
☐ Rapid weight loss	☐ Short inter-preg interval	☐ Psychological problems
☐ Anemia	☐ Medical/obstet. complications	☐ Poor diet

NUTRITIONAL ASSESSMENT FOR BREASTFEEDING WOMEN (continued)

VISIT 2 Date_____ Weeks/months postpartum_____

MATERNAL DIETARY ASSESSMENT Daily average from ___days:

Food Group	Minimum Amt./Serv.	Amt./Serv. Eaten	Sugg. Change
Animal protein	6 oz.		
Vegetable protein	1		
Milk products	3		
Breads/cereals/grains	7		
Vitamin C-rich frt./veg.	1		
Vitamin A-rich frt./veg.	1		
Other fruit/veg.	3		
Unsaturated fats	3		

Excessive: ☐ Fat ☐ Sugar ☐ Salt ☐ Caffeine

BREASTFEEDING DEFINITION

Full: ☐ Exclusive (no other liquid or solid given to the infant)
☐ Almost exclusive (vitamins, water, juice, and ritual bikost given not more than once per day, not more than 1-2 swallows)

Partial: ☐ High (>80% of feeds)
☐ Medium (79-21% of feeds)
☐ Low (<20% of feeds)

Token: ☐ (Breastfeeding episodes have insignificant caloric contribution)

COMMENTS:

VISIT 3 Date_____ Weeks/months postpartum_____

MATERNAL DIETARY ASSESSMENT Daily average from ___days:

Food Group	Minimum Amt./Serv.	Amt./Serv. Eaten	Sugg. Change
Animal protein	6 oz.		
Vegetable protein	1		
Milk products	3		
Breads/cereals/grains	7		
Vitamin C-rich frt./veg.	1		
Vitamin A-rich frt./veg.	1		
Other fruit/veg.	3		
Unsaturated fats	3		

Excessive: ☐ Fat ☐ Sugar ☐ Salt ☐ Caffeine

BREASTFEEDING DEFINITION

Full: ☐ Exclusive (no other liquid or solid given to the infant)
☐ Almost exclusive (vitamins, water, juice, and ritual bikost given not more than once per day, not more than 1-2 swallows)

Partial: ☐ High (>80% of feeds)
☐ Medium (79-21% of feeds)
☐ Low (<20% of feeds)

Token: ☐ (Breastfeeding episodes have insignificant caloric contribution)

COMMENTS:

INFANT CHART

Infant's name_____ File #_____ Study #_____

Boy ☐ Girl ☐ Birthday_____ Birthplace (Hosp)_____

Mother's Name_____ Age_____

Father's Name_____ Age_____

Obstetrician_____ Pediatrician_____

Initial Measurements: Birth Weight (gms)_____ Length (cm)_____ Head circumference (cms)_____ Chest circumference (cm)_____ Laboratory Results: Hemoglobin_____ Hematocrit_____ MCV_____ Others_____	**Comments:** Feedings, behavior, problems, etc.
24 Hours After Delivery Weight (gms)_____ Length (cm)_____ Head circumference (cms)_____ Chest circumference_____	Feedings, behavior, problems, etc.
First Visit Date_____ Weight (gms)_____ Length (cm)_____ Head circumference (cms)_____ Chest circumference_____	Feedings, behavior, problems, etc.
Second Visit Date_____ Weight (gms)_____ Length (cm)_____ Head circumference (cms)_____ Chest circumference_____	Feedings, behavior, problems, etc.
Third Visit Date_____ Weight (gms)_____ Length (cm)_____ Head circumference (cms)_____ Chest circumference_____	Feedings, behavior, problems, etc.
Fourth Visit Date_____ Weight (gms)_____ Length (cm)_____ Head circumference (cms)_____ Chest circumference_____	Feedings, behavior, problems, etc.
Laboratory Results Hemoglobin_____ Hematocrit_____ MCV_____ Others_____	

INFANT DATA

1. Name_____ Date_____

Mother's Unit No. | Delivery Date | Wk. Gest. | Length

Baby's Unit No. | Cup No.

2. Delivery type

10	Spontaneous	40	Total Breech Extraction
20	Forceps	50	Partial Breech Extraction
30	Mancial Rotation	60	C/Section

3. Anesthesia/Resuscitation Amnesia

10	None	12	Regional
11	Local	13	General

Resuscitation Method

20	None	23	Oxygen	26	Umb. Catheter
21	Cath Suct	24	Intubation	27	Drugs
22	Trach Suct	25	Positive Pressure	28	Cardiac Massage

4. Infant | 91 Premature - Spontaneous | 92 Premature - Indicated

Sex | Apgar at 1 minute

Apgar at 5 minutes | Weight (gms)

Length (cm) | Head Circum. (cm)

HCT ("H" or "C")

5. Mother

Pre-Delivery

HCT | Hgb | MCV

Post-Delivery

		HCT			Hgb		MCV
		Height (cm)				Weight, Pre-pregnant (kgs)	
		Last weight before delivery				Week recorded	
		Total weight gain (kgs)					

6. Post discharge visits

First postpartum visit: _____ weeks

HCT_____

Weight (kgs)_____

Total wt. loss/gain (to date)_____

Feeding method_____

Second postpartum visit: _____ weeks

HCT_____

Weight (kgs)_____

Total wt. loss/gain (to date)_____

Feeding method_____

Third postpartum visit: _____ weeks

HCT_____

Weight (kgs)_____

Total wt. loss/gain (to date)_____

Feeding method_____

Fourth postpartum visit: _____ weeks

HCT_____

Weight (kgs)_____

Total wt. loss/gain (to date)_____

Feeding method_____