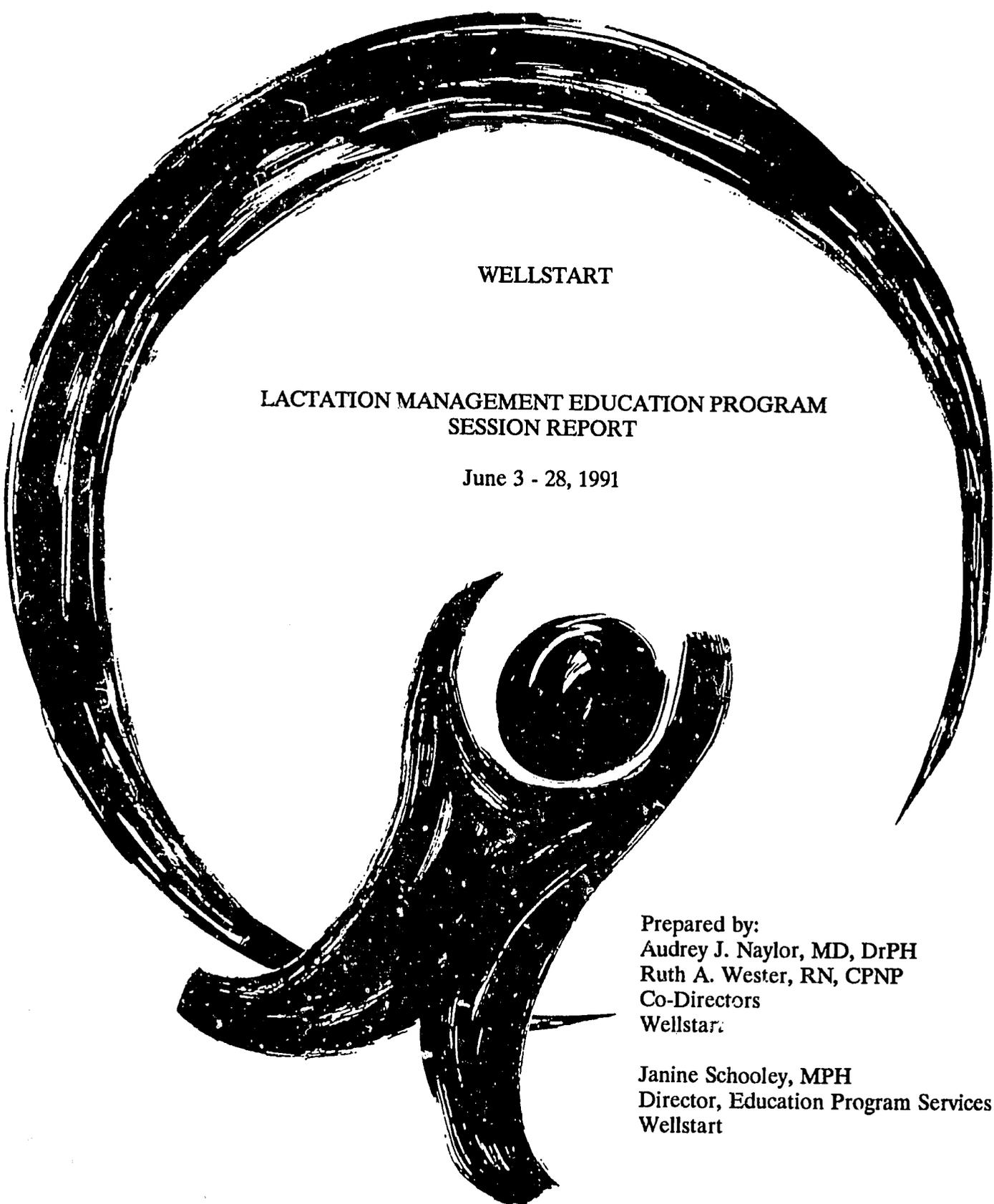


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WELLSTART

LACTATION MANAGEMENT EDUCATION PROGRAM
SESSION REPORT

June 3 - 28, 1991

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I. Introduction and Summary

A Lactation Management Education (LME) Program course was held at the Wellstart facilities in San Diego from June 3-28, 1991. Fourteen multidisciplinary health professionals from the Philippines (Manila and Cebu City), Pakistan (Lahore and Islamabad) and Tanzania (Dar es Salaam) attended the four week course. In addition, Randa Saadeh, Technical Officer in the Nutrition Unit of the World Health Organization, participated in the first two weeks only of the course. Please see Appendix 1 for a list of all participants with professional disciplines and affiliations noted.

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 2 and 3 (Course Schedule and Faculty and Staff List).

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

- (1) To determine if the experience in San Diego modified the quantity and/or quality of the participants' knowledge about breastfeeding, short unannounced pre- and post-tests were given. Results of these tests suggest that participants' knowledge base was significantly increased at the completion of the four-week course. (Average scores rose from 58.1 % to 78.1% correct answers, Appendix 4).
- (2) Individual session critiques were completed by participants for all 40 of the didactic sessions provided during the course. Participants were asked to rate the usefulness,

quality and quantity of the presentation, as well as respond to whether the speaker and/or topic should be included in the future. The tabulated scores reflect a high level of satisfaction with the quality of the material presented as well as with the speakers themselves. The mean scores for both usefulness and quality were 4.8, 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 5.

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

II. Comments on Specific Program Components

Recruitment/Selection

Though only one of the three countries represented in this course is a new entry into the LME Program (Tanzania), all of the organizations represented (four teaching hospitals, one NGO and the Hospital Operations and Management Service of the Philippine Department of Health (DOH)) are new to the Program.

For the most part, these three country groups were appropriate in terms of multidisciplinary mix, commitment and quality.

For example, the Philippine group was carefully selected to contain a strong multidisciplinary team from the Southern Islands Medical Center in Cebu City which the DOH is planning to utilize as a sub-national lactation management training center to complement the Manila-based Jose Fabella Memorial Hospital. Fabella is currently being used as the national training center. Having the Director of the Hospital Operations and Management Service of the DOH was extremely useful in strengthening linkages between the participating hospitals and the government.

In the case of Tanzania, the team was comprised of representatives from the Tanzania Food and Nutrition Centre, the Ministry of Health, and a neonatologist from a major teaching hospital. This combination should serve the national breastfeeding effort in Tanzania very well in terms of communication, networking and coordination among key elements.

The Pakistan group was comprised of two institutional teams, one full multidisciplinary team from Lahore and a single pediatrician from the Pakistan Institute of Medical Sciences. Because of funding cuts in Pakistan's Child Survival Program, a full team from the Institute was not economically possible, particularly because this facility does not have maternity services. However, because of Dr. Abbas' role on the National Breastfeeding Steering Committee, it was felt that an exception should be made so that he could attend the course. Though not ideal, and indeed Dr. Abbas very much regretted not having a full team with him, this strategy was a successful one in terms of motivating and enhancing the knowledge and skills of this critical member of the national breastfeeding scene.

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 new adjunct faculty were utilized successfully during this course to present subjects typically covered by other speakers, as well as to present totally new topics such as Mothers' Support Groups and The Cultural Context of Infant Feeding. For example, Linda Bruce from PATH was invited to provide the workshop on Curriculum Design. She had worked extensively with Wellstart Associates in Indonesia on developing lactation management training modules for use throughout the country and came with strong "how to teach" versus "what to teach" background. Though this topic has been covered by other speakers, this particular approach and speaker was new to the course. The workshop was extremely well received and, with some additional coordination with other elements of the program planning and evaluation component, will now become a part of the course curriculum.

In addition, a new member of the core Wellstart clinical faculty, Mary Kroeger, CNM, MPH, began the process of orientation and training as a new Wellstart employee by participating fully in this four week course. It was particularly valuable to have a Wellstart faculty member experience the course from the vantage point of a participant. She was thus able to bridge any possible gaps between implementors and participants and facilitate communication and understanding in both directions.

A special addition to the clinical teaching component of the course was the use of standardized patients. This approach is being utilized in Wellstart's national curriculum evaluation project for clinical skill assessment pre and post course, as well as for clinical teaching purposes. Standardized patients are actresses trained to play the part of a clinical case, based on a real case, specifically developed for the purpose by the Wellstart clinical faculty with the assistance of USC's Department of Medical Education. In this course, participants, having observed the clinical faculty manage real patients in small group clinical rotations, then had the opportunity to try out their own skill in assessing, diagnosing and managing several types of cases (including nutrition counselling) utilizing the standardized patients. Clinical faculty supervision and guidance was provided to insure a productive, competency-based learning environment. An interactive orientation to these sessions was developed and provided. Feedback from the course participants was quite positive and this new addition to the clinical experience has now been incorporated into the course curriculum.

Besides the formal classroom, clinical and field trip activities (Appendix 2), the LME course also includes several extracurricular experiences which are important components of the team development and educational processes. The camaraderie formed within and among teams is one reason for the success and sustainability of the teams' programs as they return to their countries using team synergy and motivational momentum to effect and maintain change.

During the course, several visitors participated in various activities and contributed their experience and expertise to group discussions. As mentioned previously, Randa Saadeh was able to attend the first half of the course. She not only actively participated in all course activities, including clinical rotations, but she also made a valuable contribution to the group

from the WHO perspective. For example, she made a presentation entitled "Breastfeeding Activities of the World Health Organization". In this and several other ways, Ms. Saadeh provided the group with a better understanding of WHO's breastfeeding activities and strategies. Having such a key representative from this major agency actually attend a large portion of the course should also assist greatly in efforts to maximize coordination and communication between USAID, Wellstart, and WHO on issues relating to breastfeeding and lactation management.

Margaret Kyenkya, Advisor, Infant and Child Feeding for UNICEF also visited Wellstart during the course and provided sessions on Mothers' Support Groups and UNICEF's Baby-Friendly Hospital Campaign. Again, the contributions of such distinguished representatives of UNICEF and WHO were extremely valuable in providing the course participants with first-hand information and understanding of these agencies and in helping to establish and maintain relationships.

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. A copy of each team's plans are included as Appendix 6.

The teams formally presented their plans to an audience of Program faculty, staff and special guests on the final day of the course. As an important next step, they were urged to share their plans with their supervisors, the USAID Mission, the Ministry of Health and others, as appropriate. Program participants are expected to pursue the implementation of their program plans upon returning home and to keep Wellstart faculty and staff informed of their progress through periodic communication.

III. Recommendations for the Future

Program participants representing a country new to the Wellstart Program such as Tanzania, as well as participants joining others who have previously entered the Wellstart Program such as Pakistan and the Philippines, have the potential to become powerful resources for national breastfeeding promotion and protection efforts. The professional knowledge and skills, the materials and motivation, and the sense of teamwork acquired in San Diego create a strong basis for implementing the short and long-range goals they have articulated. Building upon

this groundwork of well trained, highly motivated professionals should be a priority over the next year 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 can 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, negotiations are currently underway to enter into the Program additional teams from Pakistan over the next several courses. This is particularly exciting in light of the Pakistani government's and the USAID Mission's continuing commitment to developing a national breastfeeding program with a strong lactation management education component. Discussions have been held between Wellstart and the Mission concerning how best to meet the growing need for technical assistance in the area of short course curriculum development. It is anticipated that, under the guidance of a Wellstart consultant, key representatives of the teams already participating in the Program will come together to adapt and refine an appropriate short course and supporting materials which can be used throughout Pakistan. Through such activities, and due to the fact that a member of the National Steering Committee is now a Wellstart Associate, coordination between the provincial teams and the national effort should be even stronger.

The Tanzanian plans, though quite ambitious, appear to be well-tailored to their particular situation. The centralized health system infrastructure, the high level of experience and good reputation of the Tanzania Food and Nutrition Centre and its key personnel, and the support of donor agencies such as SIDA, will all contribute to the successful implementation of the team's plans.

The Philippine DOH's strategy of developing a sub-national training center at Cebu appears to be quite well validated by the quality and dedication of the Southern Islands Medical Center team. It will, however, be a challenge to coordinate the two training centers (Fabella and Southern Islands) so that their efforts remain complementary and maximally beneficial. It may be better to concentrate on firmly and successfully establishing training programs at these two centers and gaining from the experience before attempting to establish a second sub-national training center on another island. Wellstart will, of course, be happy to assist the DOH in strengthening existing institutional capability and/or in expanding to additional institutions as the decision is made to do so.

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 international funding agencies such as UNICEF and SIDA, will lend their commitment and support to assure that this important initial investment will develop into long term, institutionalized teaching and clinical service programs.

APPENDIX i
Participants

WELLSTART
Lactation Management Education Program
June 3 - 28, 1991

COURSE PARTICIPANTS

PHILIPPINES

Southern Islands Medical Center
Cebu City, Philippines

Dr. Quintin Derikito
Hospital Chief

Dr. Rosita Galdo
Medical Specialist I
Department of Pediatrics

Dr. Belinda Pañares
Chairman, Department of Obstetrics and
Gynecology

Delia Mediano
Nursing Service Director

Department of Health
Manila, Philippines

Dr. Margarita Galon
Director III, Hospital Operations and
Management Service

PAKISTAN

Sir Ganga Ram Hospital
Fatimah Jinnah Medical College
Lahore, Pakistan

Children's Hospital
Pakistan Institute of Medical Sciences
Islamabad, Pakistan

Miss Rukhsana Ilyas
Labor Room Staff Nurse/Midwife

Dr. Khwaja Abbas
Pediatrician
Head, Postgraduate Teaching Unit
Head, Lactation Management Clinic

Dr. Hajira Hanif
Professor, Obstetrics-Gynecology

Dr. Nishat Maqsood
Associate Professor, Preventive Pediatrics

TANZANIA

Tanzania Food and Nutrition Centre
Dar es Salaam, Tanzania

Pauline Kisanga
Director, Community Health and Nutrition
and Project Coordinator
Tanzania Food and Nutrition Centre

Margareth Rweramira
Assistant Nutritionist
Tanzania Food and Nutrition Centre

Dr. Augustin Massawe
Neonatologist
Muhimbili Medical Centre

Lena Mfalila
Nursing Officer
Ministry of Health

Monica Ngonyani
Senior Nutritionist and Medical Assistant
Programme Officer, Tanzania Food and
Nutrition Centre

Randa Saadeh
Technical Officer
Nutritionist
World Health Organization
Geneva, Switzerland

APPENDIX 2
Course Schedule

WELLSTART
Lactation Management Education Program
June 3 - 28, 1991

COURSE SCHEDULE

Week I

5/31/91

Monday June 3	Tuesday June 4	Wednesday June 5	Thursday June 6	Friday June 7
<p>8:00 - 8:30 Escort to Wellstart and Tour of Facilities</p> <p>8:30 - 9:45 General Orientation to Program and Overview of Wellstart</p> <p>10:00 - 1:00 Team Presentations</p>	<p>8:00 - 9:30 Breastfeeding and Child Survival, Part I -A. Naylor</p> <p>9:45 - 12:00 Breastfeeding and Child Survival, Part II -A. Naylor</p>	<p>8:00 - 9:45 Tour of UCSD -N. Powers -V. Newman</p> <p>10:00 - 12:00 Management of Successful Breastfeeding -E. Creer</p>	<p>9:45 - 10:45 Orientation to Clinical Experiences -N. Powers -Faculty</p> <p>11:00 - 12:00 Breast Examination -V. Lops</p>	<p>8:00 - 9:45 Maternal Nutrition -V. Newman</p> <p>10:00 - 1:00 Clinical Experiences/ Audiovisual Review</p> <p><i>Lactation Clinic (Clinic House)</i> Galon Kisanga Panares Mfalila Abbas Saadeh</p> <p><i>Nutrition Counseling (Vicky's Office)</i> Galdo Rweramira Ilyas</p> <p><i>Breast Exam Review (Classroom)</i> Mediano Massawe Hanif</p> <p><i>Videotape Review (Library)</i> Derikito Ngouyani Maqsood</p>
1:00 - 2:00 LUNCH with Faculty and Staff	12:00 - 1:00 LUNCH	12:00 - 1:00 LUNCH	12:00 - 1:00 LUNCH	1:00 - 2:00 LUNCH
	<p>1:00 - 2:30 Anatomy and Physiology -A. Naylor</p>	<p>1:00 - 2:00 Film: "Amazing Newborn"</p> <p>2:00 - 3:30 Psychosocial and Cultural Aspects of Infancy: Implications for Breastfeeding -S. Dixon</p> <p>3:45 - 4:30 Orientation to Program Planning Assignment -J. Schooley -E. Creer -A. Naylor</p>	<p>1:00 - 2:30 Infant Problems Impacting Successful Lactation and Breastfeeding -R. Wester</p> <p>2:45 - 4:30 Maternal Problems Impacting Successful Lactation and Breastfeeding -R. Wester</p>	<p>2:00 - 5:30 Curriculum Design -L. Bruce</p>

Monday June 10	Tuesday June 11	Wednesday June 12	Thursday June 13	Friday June 14
<p>9:00 - 9:45 Breastfeeding Activities of the World Health Organization -R. Saadeh</p> <p>10:00 - 11:30 Oral-Motor Dysfunction in Infants: Assessment and Intervention -K. Bouma</p> <p>11:45 - 12:45 Breastfeeding and Jaundice -N. Powers</p>	<p>8:30 - 9:45 Hospital Rounds (Classroom 8:15) Panares Mfalila Abbas Galdo Saadeh Rweramira</p> <p>10:00 - 1:00 Clinical Experiences/ Audiovisual Review</p> <p><i>Lactation Clinic</i> (Clinic House) Mediano Massawe Hanif Derikito Ngonyani Maqsood</p> <p><i>Nutrition Counseling</i> (Vicky's Office) Galon Kisanga Saadeh</p> <p><i>Breast Exam Review</i> (Classroom) Panares Mfalila Abbas</p> <p><i>Videotape Review</i> (Library) Galdo Rweramira Ilyas</p>	<p>10:00 - 1:00 Program Planning Workshops -A. Brownlee -E. Creer</p>	<p>8:30 - 9:45 Hospital Rounds (Classroom 8:15) Mediano Massawe Hanif Ilyas Derikito</p> <p>10:00 - 1:00 Clinical Experiences/ Audiovisual Review</p> <p><i>Lactation Clinic</i> (Clinic House) Panares Mfalila Abbas Galdo Ilyas Rweramira</p> <p><i>Nutrition Counseling</i> (Vicky's Office) Mediano Massawe Hanif</p> <p><i>Breast Exam Review</i> (Classroom) Derikito Ngonyani Maqsood</p> <p><i>Videotape Review</i> (Library) Galon Kisanga Kroeger Saadeh</p>	<p>8:00 - 11:00 Comparative Lactation Field Trip to the San Diego Wild Animal Park -R. Riechca</p>
<p>12:45 - 1:45 LUNCH</p>	<p>1:00 - 2:00 LUNCH</p>	<p>1:00 - 2:00 LUNCH</p>	<p>1:00 - 1:30 LUNCH</p>	
<p>1:45 - 5:45 Program Planning and Evaluation -A. Brownlee</p>	<p>2:00 - 3:30 Contraindication and Controversies -A. Naylor</p> <p>3:45 - 5:15 Comparative Lactation -A. Naylor</p>	<p>2:00 - 4:00 Relactation -E. Jones</p> <p>4:15 - 5:15 The Infant with Cleft Lip and/or Palate -E. Jones</p>	<p>1:30 - 3:30 Breastfeeding, Fertility, and Child Spacing -M. Labbok</p> <p>3:45 - 5:00 Infant Nutrition and Weaning -V. Newman</p>	<p>11:00 - 6:00 Intercultural Orientation -Faculty</p>

Monday June 17	Tuesday June 18	Wednesday June 19	Thursday June 20	Friday June 21
<p>8:00 - 10:00 Human Milk for the Preterm Infant -R. Schanler</p> <p>10:15 - 12:00 Lactation Management for Mothers of Preterm Infants -L. Levy</p>	<p>8:30 - 9:45 Hospital Rounds (Classroom 8:15) Galon Kisanga Kroeger Ngonyani Msqood</p> <p>10:00 - 11:15 Lactation Management Education in Medical Training Programs -N. Powers -Faculty</p> <p>11:30 - 12:30 Management of Maternal/ Infant Separation -L. Scott</p>	<p>10:00 - 1:00 Clinical Experiences/ Audiovisual Review</p> <p><i>Lactation Clinic (Clinic House)</i> Derikito Ngonyani Maqsood Galon Kisanga Kroeger</p> <p><i>Nutrition Counseling (Vicky's Office)</i> Panares Mfalila Abbas</p> <p><i>Breast Exam Review (Classroom)</i> Galdo Rweramira Iyas</p> <p><i>Videotape Review (Library)</i> Mediano Massawe Hanif</p>	<p>8:30 - 9:45 Oral-Motor Rounds (Classroom 8:15) Galon Kisanga Kroeger Panares Mfalila</p> <p>10:00 - 1:00 Clinical Experiences/ Audiovisual Review</p> <p><i>Standardized Patients (Clinic House)</i> Panares Mfalila Abbas Mediano Galdo Rweramira Iyas Massawe</p> <p><i>Slide Set Review (Journal Room)</i> Derikito Ngonyani Maqsood Hanif</p> <p><i>Independent Study</i> Galon Kisanga Kroeger</p>	<p>9:30 - 11:00 Drugs and Contaminants -P. Anderson</p> <p>11:15 - 1:15 Slow Gain/Insufficient Milk Syndrome -N. Powers</p>
<p>12:00 - 1:00 LUNCH</p>	<p>12:30 - 1:30 LUNCH</p>	<p>1:00 - 2:00 LUNCH</p>		<p>1:15 - 2:00 LUNCH</p>
<p>1:00 - 4:00 Clinical Experiences/ Audiovisual Review</p> <p><i>Lactation Clinic (Clinic House)</i> Galdo Rweramira Iyas Mediano Massawe Hanif</p> <p><i>Nutrition Counseling (Vicky's Office)</i> Derikito Ngonyani Maqsood</p> <p><i>Breast Exam Review (Classroom)</i> Galon Kisanga Kroeger</p> <p><i>Videotape Review (Library)</i> Panares Mfalila Abbas</p>	<p>1:30 - 3:00 Growth Monitoring Programs -V. Newman</p> <p>3:15 - 5:00 Orientation to Standardized Patients -E. Croer -Faculty</p>	<p>2:00 - 4:00 The Effect of Continuous Social Support During Labor on Perinatal Morbidity -M. Klaus</p> <p>4:15 - 5:30 Group Discussion of Films Seen During Audiovisual Reviews -R. Wester -Faculty</p>	<p>1:00 - 3:00 Field Trip to ISSSTECALI Hospital, Tijuana, Mexico -E. Jones -G. Chong</p>	<p>2:00 - 6:00 Program Planning Workshops -A. Brownlee -E. Croer</p> <p>Fiesta! Saturday, June 22 5:00 - 10:00 p.m.</p>

Monday June 24	Tuesday June 25	Wednesday June 26	Thursday June 27	Friday June 28
<p>8:30 - 9:45 Oral-Motor Rounds (Classroom 3:15) Galdo Rweramira Ilyas Abbas Ngonyani</p> <p>10:00 - 12:00 Effects of Maternal Nutrition on Milk Volume and Composition -K. Dewey</p> <p>12:15 - 1:00 Growth Patterns of Breastfed Infants -K. Dewey</p>	<p>8:00 - 9:15 Mothers' Support Groups -M. Kyenkya-Isabirye</p> <p>9:30 - 10:45 UNICEF's Baby-Friendly Hospital Campaign -M. Kyenkya-Isabirye</p> <p>11:00 - 1:00 Women, Work, and Breastfeeding -P. VanEsterik</p>	<p>10:00 - 1:00 Clinical Experiences/ Audiovisual Review</p> <p><i>Standardized Patients (Clinic House)</i> Panares Mfalila Abbas Mediano Galdo Rweramira Ilyas Massawe</p> <p><i>Slide Set Review (Journal Room)</i> Galton Kisanga Kroeger</p> <p><i>Independent Study</i> Derikito Ngonyani Maqsood Hanif</p>	<p>8:30 - 9:45 Oral-Motor Rounds (Classroom 3:15) Mediano Massawe Hanif Derikito Maqsood</p> <p>10:00 - 1:00 Clinical Experiences/ Audiovisual Review</p> <p><i>Standardized Patients (Clinic House)</i> Derikito Ngonyani Maqsood Hanif Galton Kisanga Kroeger</p> <p><i>Slide Set Review (Journal Room)</i> Galdo Rweramira Ilyas</p> <p><i>Independent Study</i> Panares Mfalila Abbas Mediano Massawe</p>	<p>9:00 - 12:30 Team Program Plan Presentations -Faculty</p> <p>12:30 - 1:00 Film: "Breastfeeding: Protecting a Natural Resource"</p>
<p>1:00 - 2:00 LUNCH</p>	<p>1:00 - 2:00 LUNCH</p>	<p>1:00 - 2:00 LUNCH</p>	<p>1:00 - 2:00 LUNCH</p>	<p>1:00 - 2:00 LUNCH</p>
<p>2:00 - 3:00 Clinical Experiences/ Audiovisual Review</p> <p><i>Standardized Patients (Clinic House)</i> Derikito Ngonyani Maqsood Hanif Galton Kisanga Kroeger</p> <p><i>Slide Set Review (Journal Room)</i> Panares Mfalila Abbas Mediano Massawe</p> <p><i>Independent Study</i> Galdo Rweramira Ilyas</p> <p>5:30 - 8:30 Teaching Resources Review and Selection (Philippines and Pakistan)</p>	<p>2:00 - 4:00 The Cultural Context of Infant Feeding -P. VanEsterik</p> <p>4:15 - 5:30 Programs to Promote and Protect Breastfeeding -A. Naylor</p> <p>6:00 - 9:00 Teaching Resources Review and Selection (Tanzania)</p>	<p>2:00 - 3:30 Case Management Review Session -R. Wester -Faculty</p> <p>3:45 - 5:45 Consultant's Report Seminar (Review of 20 Questions Assignment) -A. Naylor -Faculty</p>	<p>2:00 - 3:30 Formula Marketing and the WHO Code -J. Schooley -A. Naylor</p> <p>3:45 - 5:45 Professional Roles and Responsibilities on the Multidisciplinary Team -A. Naylor -Faculty</p>	<p>2:00 - 4:00 Administrative Matters</p> <p>7:00 - 10:00 Closing Ceremonies and Farewell Banquet</p>

APPENDIX 3
Faculty and Staff List

WELLSTART
Lactation Management Education Program
June 3 - 28, 1991

FACULTY AND STAFF

Wellstart Core Faculty

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

Lois Scott, RN
Lactation Specialist

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

Adjunct Faculty

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

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

Ann Brownlee, PhD
Medical Sociologist and International
Health Consultant
Escondido, California

Linda Bruce
Associate Program Officer
Program for Appropriate Technology in Health
(PATH)
Washington, DC

Gabriel Chong, MD
Director
Hospital ISSSTECALI
Tijuana, Mexico

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

Suzanne Dixon, MD, FAAP
Associate Professor of Pediatrics
University of California, San Diego
Medical Director, Nursery Services, Family
Maternity Care Center
UCSD Medical Center
San Diego, California

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

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

Margaret Kyenkya-Isabirye
Advisor, Infant and Child Feeding
UNICEF
New York, New York

Miriam Labbok, MD, MPH
Associate Professor and Director,
Breastfeeding and Maternal and Child Health
Institute for International Studies in Natural
Family Planning (IISNFP)
Department of Obstetrics and Gynecology
Georgetown University Medical Center
Washington, DC

Linda K. Levy, RN
Clinical Nurse Specialist
Neonatal Intensive Care Unit
UCSD Medical Center
San Diego, California

Randa Saadeh
Technical Officer
Nutrition Unit
World Health Organization
Geneva, Switzerland

Vanda Lops, CNM
Assistant Clinical Professor
Department of Reproductive Medicine and
Director, Nurse Midwifery Service
UCSD Medical Center
San Diego, California

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

Randy Rieches
Animal Services Manager (Mammals)
San Diego Wild Animal Park
Escondido, California

Penny Van Esterik, PhD
York Centre for Health Studies
Women and Health Research Programme
Institute for Social Research
York University
North York, Ontario, Canada

Administrative Staff

Cynthia Collins
Staff Assistant

Bruny Lopez
Clinical Secretary

Lisa Daigle
Financial Manager

Lynn Nelson
Accounting Assistant

Kathleen Finn, MA
Administrative Services Director

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APPENDIX 4
Pre and Post Test Scores Summary

WELLSTART
Lactation Management Education Program

June 3 - 28, 1991

PRE- AND POST-TEST SUMMARY

Team	Disc.	Name	Pre-Test				Post-Test				Difference Between Pre- and Post-Test
			# Incorrect	# Omitted	# Correct	% Correct	# Incorrect	# Omitted	# Correct	% Correct	
PIMS	Ped	Khweja Abbas	4	1	10	66.67	2	1	12	80.00	+13.33
SIMC	OthP	Quintin Derikito	7	0	8	53.33	2	0	13	86.67	+33.34
SIMC	Ped	Rosita Galdo	5	0	10	66.67	3	0	12	80.00	+13.33
DHP	OthP	Margarita Galon	7	0	8	53.33	3	0	12	80.00	+26.67
SGRH	Ob	Hajira Hanif	4	1	10	66.67	1	0	14	93.33	+26.66
SGRH	N	Rukhsana Ilyas	4	1	10	66.67	1	0	14	93.33	+26.66
TFNC	Nutr	Pauline Kisanga	4	3	8	53.33	3	0	12	80.00	+26.67
TFNC	Ped	Augustine Massawe	6	0	9	60.00	5	0	10	66.67	+6.67
SGRH	Ped	Nishat Maqsood	4	1	10	66.67	1	0	14	93.33	+26.66
SIMC	N	Delia Mediano	5	0	10	66.67	7	0	8	53.33	-13.34
TFNC	N	Lena Mfalila	9	3	3	20.00	4	0	11	73.33	+53.33
TFNC	Nutr	Monica Nkonyani	4	3	8	53.33	3	0	12	80.00	+26.67
SIMC	Ob	Belinda Pañares	4	0	11	73.33	2	0	13	86.67	+13.34
TFNC	Nutr	Margareth Rweramira	5	3	7	46.67	8	0	7	46.67	+0.00
GROUP AVERAGE			5.14	1.14	8.71	58.10	3.21	0.07	11.71	78.10	+20.00

DHP: Department of Health, Manila, Philippines
PIMS: Pakistan Institute for Medical Sciences, Lahore, Pakistan
SGRH: Sir Ganga Ram Hospital, Islamabad, Pakistan
SIMC: Southern Islands Medical Center, Cebu City, Philippines
TFNC: Tanzania Food and Nutrition Centre, Dar-es-Salaam, Tanzania

Ped: Pediatrician
Ob: Obstetrician/Gynecologist
OthP: Other Physician
N: Nurse
Nutr: Nutritionist

Comparison of Scores (% Correct) by Team and Discipline

Team ↓ Disc	Pre-Test						Post-Test						% Improvement Between Pre- and Post-Test					
	DHP	PIMS	SGRH	SIMC	TFNC	Disc. Avg.	DHP	PIMS	SGRH	SIMC	TFNC	Disc. Avg.	DHP	PIMS	SGRH	SIMC	TFNC	Disc. Avg.
Nurse (3)			67	67	20	51.3			93	53	73	73.0			+26	-14	+53	+21.7
Nutritionist (3)					51	51.0					69	69.0					+18	+18.0
Pediatrician (4)		67	67	67	60	65.3		80	93	80	67	80.0		+13	+26	+13	+7	+14.8
Obstetrician (2)			67	73		70.0			93	87		90.0			+26	+14		+20.0
Oth. Physician (2)	53			53		53.0	80			87		83.5	+27			+34		+30.5
Total Physician Average by Team	53.0	67.0	67.0	64.3	60.0		80.0	80.0	93.0	84.7	67.0		+27.0	+13.0	+26.0	+20.3	+7.0	
Total Team Average	53.0	67.0	67.0	65.0	43.7		80.0	80.0	93.0	76.8	69.7		+27.0	+13.0	+26.0	+11.8	+26.0	

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APPENDIX 5
Course Evaluation Summary

WELLSTART
Lactation Management Education Program
June 3 - 28, 1991

SUMMARY OF OVERALL COURSE EVALUATION

SCALES USED FOR OVERALL COURSE EVALUATION RATINGS

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

A total of fourteen evaluations were completed on the final day of the course with the following breakdown of disciplines indicated: three nutritionists; three nurses; four pediatricians or neonatologists; two obstetricians; and two other physicians.

	Nutr	Nurs	Ped	Ob	Oth Phys	Physician		Group	
						Avg	Tot	Avg	Tot
SEMINARS									
1. Program Planning Workshops									
Usefulness ¹	5.0	5.0	4.8	5.0	5.0	4.9		4.9	
# of sessions: not enough	2	2	2	1			3		7
just right	1	1	2	1	2		5		7
too many									
not answered									
CLINICAL EXPERIENCES									
2. Tour of UCSD									
Usefulness ¹	4.0	5.0	3.5	5.0	4.5	3.5		4.3	
3. Hospital Rounds									
Usefulness ¹	4.5	5.0	3.5	4.5	4.5	4.0		4.3	
# of sessions: not enough			1		1		2		2
just right	2	3	2	2	1		5		10
too many	1								1
not answered			1				1		1
# of patients: not enough	2	1							3
just right		1	2	2			4		5
too many									
not answered	1	1	2		2		4		6

	Nutr	Nurs	Ped	Ob	Oth Phys	Physician		Group	
						Avg	Tot	Avg	Tot
4. Oral-Motor Assessment Rounds									
Usefulness ¹	4.5	5.0	4.0	4.0	5.0	4.3		4.5	
# of sessions: not enough									
just right	2	3	4	2	2		8		13
too many									
not answered	1								1
# of patients: not enough	2								2
just right		2	2	2	1		5		7
too many									
not answered	1	1	2		1		3		5
5. Lactation Clinic									
Usefulness ¹	4.7	5.0	4.5	5.0	5.0	4.8		4.8	
# of sessions: not enough									
just right	3	3	4	2	2		8		14
too many									
not answered									
# of patients: not enough									
just right	2	2	2	2	2		6		10
too many									
not answered	1	1	2				2		4
6. Standardized Patients									
Usefulness ¹	4.3	5.0	4.7	5.0	5.0	4.9		4.8	
# of sessions: not enough		1			1		1		2
just right	2	2	4	2	1		7		11
too many	1								1
not answered									
# of patients: not enough		1			1		1		2
just right	3	1	2	2	1		5		9
too many									
not answered		1	2				2		3

	Nutr	Nurs	Ped	Ob	Oth Phys	Physician		Group	
						Avg	Tot	Avg	Tot
7. Nutrition Counseling									
Usefulness ¹	5.0	5.0	4.8	5.0	5.0	4.9		4.9	
# of sessions: not enough	1	1			1		1		3
just right	2	2	4	2	1		7		11
too many									
not answered									
# of patients: not enough	1	1			1		1		3
just right	2	1	2	2	1		5		8
too many									
not answered		1	2				2		3
8. Breast Exam Review Session									
Usefulness ¹	4.3	5.0	3.3	5.0	5.0	4.1		4.4	
AUDIO VISUAL REVIEWS									
9. Video Tape Review Session									
Usefulness ¹	4.3	5.0	5.0	5.0	5.0	5.0		4.9	
10. Slide Set Review Session									
Usefulness ¹	4.3	5.0	4.0	5.0	4.5	4.4		4.5	
FIELD TRIPS									
11. Tijuana Children's Hospital, ISSSTECALI									
Usefulness ¹	2.7	4.2	4.5	5.0	5.0	4.8		4.2	
12. San Diego Wild Animal Park									
Usefulness ¹	4.0	4.5	4.5	5.0	4.5	4.7		4.5	
VIDEOTAPES SHOWN DURING COURSE									
13. M. Klaus, "Amazing Newborn"									
Usefulness ¹	4.7	5.0	4.3	5.0	4.5	4.5		4.6	
14. B. Bates, "Breasts & Axillae"									
Usefulness ¹	4.7	5.0	3.5	4.5	4.5	4.0		4.4	
15. IISNFP, "Breastfeeding: Protecting a Natural Resource"									
Usefulness ¹	5.0	5.0	5.0	4.5	4.5	4.8		4.9	

	Nutr	Nurs	Ped	Ob	Oth Phys	Physician		Group	
						Avg	Tot	Avg	Tot
READING ASSIGNMENTS									
16. Lawrence, Breastfeeding — A Guide for the Medical Profession (physicians only)									
Did not read	1	1							2
Length: too long									
just right	1	2	4	1	2		7		10
too short									
not answered	1			1			1		2
Ease of reading ²	3.5	5.0	5.0	5.0	4.5	4.9		4.7	
Usefulness ¹	4.5	5.0	5.0	5.0	4.5	4.9		4.8	
Use in future? yes	2	2	4	2	2		8		12
no									
not answered									
17. Helsing and King, Breastfeeding in Practice — A Manual for Health Workers (non-physicians only)									
Did not read			2	1	2		5		5
Length: too long									
just right	2	3	2	1			3		8
too short									
not answered	1								1
Ease of reading ²	4.7	5.0	5.0	5.0		5.0		4.9	
Usefulness ¹	5.0	5.0	5.0	5.0		5.0		5.0	
Use in future? yes	3	3	2	1			3		9
no									
not answered									
18. Akre (WHO), Infant Feeding — The Physiological Basis									
Did not read		1		1	1		2		3
Length: too long									
just right	1	2	3	1	1		5		8
too short									
not answered	2		1				1		3
Ease of reading ²	5.0	5.0	5.0	5.0	4.0	4.8		4.9	
Usefulness ¹	5.0	5.0	4.0	5.0	4.0	4.2		4.6	
Use in future? yes	3	2	3	1	1		5		10
no			1				1		1
not answered									

	Nutr	Nurs	Ped	Ob	Oth Phys	Physician		Group	
						Avg	Tot	Avg	Tot
19. APHA, Legislation & Policies to Support Maternal and Child Nutrition, Report No. 6									
Did not read	1	3	2	2	1		5		9
Length: too long									
just right	1		2		1		3		4
too short									
not answered	1								1
Ease of reading ²	3.5		5.0		4.0	4.7		4.2	
Usefulness ¹	4.0		4.0		4.0	4.0		4.0	
Use in future? yes	2		2		1		3		5
no									
not answered									
20. Baer & Winikoff, Breastfeeding — Program, Policy, and Research Issues									
Did not read		3	3	1	1		5		8
Length: too long									
just right	2		1	1	1		3		5
too short									
not answered	1								1
Ease of reading ²	4.0		3.0	5.0	4.0	4.0		4.0	
Usefulness ¹	4.3		3.0	5.0	4.0	4.0		4.2	
Use in future? yes	2		1	1	1		3		5
no									
not answered	1								1
21. Brownlee, Breastfeeding, Weaning, and Nutrition: The Behavioral Issues									
Did not read	1	1	1				1		3
Length: too long									
just right	1	2	2	2	1		5		8
too short									
not answered	1		1		1		2		3
Ease of reading ²	4.5	5.0	5.0	5.0	5.0	5.0		4.9	
Usefulness ¹	5.0	5.0	4.7	4.5	5.0	4.7		4.8	
Use in future? yes	2	2	3	2	2		7		11
no									
not answered									

	Nutr	Nurs	Ped	Ob	Oth Phys	Physician		Group	
						Avg	Tot	Avg	Tot
22. Huffman & Combest, Breastfeeding: A Prevention and Treatment Necessity for Diarrhea									
Did not read		1	2	2			4		5
Length: too long									
just right	2	2	2		2		4		8
too short									
not answered	1								1
Ease of reading ²	4.7	5.0	5.0		4.0	4.5		4.7	
Usefulness ¹	5.0	5.0	5.0		4.0	4.5		4.8	
Use in future? yes	3	2	2		2		4		9
no									
not answered									
23. IISNFP, Guidelines for Breastfeeding in Family Planning and Child Survival Programs									
Did not read	1		1				1		2
Length: too long									
just right	2	3	2	1	1		4		9
too short			1				1		1
not answered				1	1		2		2
Ease of reading ²	5.0	5.0	5.0	5.0	4.0	4.7		4.8	
Usefulness ¹	5.0	5.0	5.0	4.5	4.0	4.6		4.8	
Use in future? yes	2	3	3	2	2		7		12
no									
not answered									
24. IISNFP, Breastfeeding — Protecting a Natural Resource									
Did not read	2		1	1			2		4
Length: too long									
just right	1	3	2	1	2		5		9
too short									
not answered			1				1		1
Ease of reading ²	-	5.0	5.0	5.0	4.5	4.8		4.9	
Usefulness ¹	5.0	5.0	4.7	5.0	4.5	4.7		4.8	
Use in future? yes	1	3	3	1	2		6		10
no									
not answered									

	Nutr	Nurs	Ped	Ob	Oth Phys	Physician		Group	
						Avg	Tot	Avg	Tot
25. IRD/Westinghouse, Child Survival: Risks and the Road to Health									
Did not read	1	1	1	1			2		4
Length: too long		1							1
just right	2	1	2	1	2		5		8
too short									
not answered			1				1		1
Ease of reading ²	4.5	5.0	5.0	5.0	4.0	4.7		4.7	
Usefulness ¹	5.0	5.0	4.7	4.0	4.0	4.3		4.6	
Use in future? yes	2	2	3	1	1		5		9
no									
not answered					1		1		1
26. Institute of Medicine, Nutrition During Lactation — Summary, Conclusions, and Recommendations									
Did not read		1							1
Length: too long									
just right	1	2	3	1	1		5		8
too short	1		1		1		2		3
not answered	1			1			1		2
Ease of reading ²	5.0	5.0	4.8	5.0	4.5	4.8		4.9	
Usefulness ¹	5.0	5.0	4.8	4.0	4.5	4.5		4.7	
Use in future? yes	3	2	4	2	2		8		13
no									
not answered									
27. Institute of Medicine, Summary — Nutrition During Pregnancy									
Did not read		2							2
Length: too long									
just right	1	1	3	1	1		5		7
too short	1		1		1		2		3
not answered	1			1			1		2
Ease of reading ²	5.0	5.0	5.0	5.0	4.5	4.9		4.9	
Usefulness ¹	5.0	5.0	5.0	4.0	4.5	4.6		4.8	
Use in future? yes	3	1	4	2	2		8		12
no									
not answered									

	Nutr	Nurs	Ped	Ob	Oth Phys	Physician		Group	
						Avg	Tot	Avg	Tot
28. IOCU, Protecting Infant Health: A Health Workers' Guide to the International Code of Marketing of Breastmilk Substitutes									
Did not read	3								3
Length: too long									
just right		3	4	1	2		7		10
too short									
not answered				1			1		1
Ease of reading ²		5.0	5.0	5.0	4.5	4.9		4.9	
Usefulness ¹		5.0	4.8	5.0	4.5	4.8		4.8	
Use in future? yes		3	4	2	2		8		11
no									
not answered									
29. IPPF, Breastfeeding, Fertility & Contraception									
Did not read			3		1		4		4
Length: too long		1							1
just right	2	2	1	1	1		3		7
too short									
not answered	1			1			1		1
Ease of reading ²	4.7	5.0	5.0	5.0	4.0	4.8		4.8	
Usefulness ¹	5.0	5.0	5.0	5.0	4.0	4.8		4.9	
Use in future? yes	2	3	1	2	1		4		9
no									
not answered	1								1
30. NCI, Breast Exams — What You Should Know									
Did not read	1		1				1		2
Length: too long									
just right	2	3	2	1	1		4		9
too short			1				1		1
not answered				1			1		1
Ease of reading ²	4.5	5.0	5.0	5.0	4.0	4.7		4.7	
Usefulness ¹	5.0	5.0	4.5	5.0	4.0	4.5		4.7	
Use in future? yes	2	3	2	2	2		6		11
no									
not answered			1				1		1

	Nutr	Nurs	Ped	Ob	Oth Phys	Physician		Group	
						Avg	Tot	Avg	Tot
31. NCI, What You Need to Know About Breast Cancer									
Did not read		2	2		2		4		6
Length: too long									
just right	2	1	1	1			2		5
too short			1				1		1
not answered	1			1			1		2
Ease of reading ²	5.0	5.0	5.0	5.0		5.0		5.0	
Usefulness ¹	4.7	5.0	5.0	5.0		5.0		4.9	
Use in future? yes	3	1	1	2			3		7
no									
not answered			1				1		1
32. The Population Council, Breastfeeding — A Nurse's Guide									
Did not read	2		3	2	2		7		9
Length: too long									
just right	1	3	1				1		5
too short									
not answered									
Ease of reading ²	5.0	5.0	5.0			5.0		5.0	
Usefulness ¹	5.0	5.0	3.0			3.0		4.6	
Use in future? yes		3	1				1		4
no									
not answered	1								1
33. Royal College of Midwives, Successful Breastfeeding: A Practical Guide for Mothers and Midwives and Others Supporting Breastfeeding Mothers									
Did not read	1		1	1	2		4		5
Length: too long									
just right	1	3	3	1			4		8
too short									
not answered	1								1
Ease of reading ²	5.0	5.0	5.0	5.0		5.0		5.0	
Usefulness ¹	4.5	5.0	4.7	5.0		4.8		4.8	
Use in future? yes	1	3	3	1			4		8
no									
not answered	1								1

	Nutr	Nurs	Ped	Ob	Oth Phys	Physician		Group	
						Avg	Tot	Avg	Tot
34. UNICEF, All for Health									
Did not read	1	2	1	2			3		6
Length: too long									
just right	1	1	2		2		4		6
too short									
not answered	1		1				1		2
Ease of reading ²	4.5	5.0	4.7		4.5	4.6		4.6	
Usefulness ¹	4.5	5.0	4.3		4.5	4.4		4.5	
Use in future? yes	2	1	3		2		5		8
no									
not answered									
35. UNICEF/WHO/UNESCO, Facts for Life									
Did not read	1	1		1			1		3
Length: too long									
just right	1	2	3	1	1		5		8
too short									
not answered	1		1				1		2
Ease of reading ²	4.5	5.0	5.0	5.0	4.5	4.9		4.8	
Usefulness ¹	4.5	5.0	5.0	5.0	4.5	4.9		4.8	
Use in future? yes	2	2	4	1	2		7		11
no									
not answered									
36. UNICEF, State of the World's Children 1991									
Did not read	2	2	1	2			3		7
Length: too long					1		1		1
just right	1	1	2		1		3		5
too short									
not answered			1				1		1
Ease of reading ²	5.0	5.0	5.0		4.5	4.8		4.9	
Usefulness ¹	5.0	5.0	4.7		4.5	4.6		4.7	
Use in future? yes	1	1	3		2		5		7
no									
not answered									

	Nutr	Nurs	Ped	Ob	Oth Phys	Physician		Group	
						Avg	Tot	Avg	Tot
37. USDHHS, Report of the Surgeon General's Workshop on Breastfeeding and Human Lactation									
Did not read	2	3	2	1			3		8
Length: too long					1		1		1
just right	1		2	1	1		4		5
too short									
not answered									
Ease of reading ²	5.0		5.0	5.0	4.5	4.8		4.8	
Usefulness ¹	5.0		5.0	5.0	4.5	4.8		4.8	
Use in future? yes	1		2	1	2		5		6
no									
not answered									
38. Winikoff, Semeraro & Zimmerman, Contraception During Breastfeeding. A Clinician's Sourcebook									
Did not read	1	1	3				3		5
Length: too long									
just right		2	1	1	2		4		6
too short									
not answered	2			1			1		3
Ease of reading ²	4.5	5.0	5.0	5.0	4.5	4.8		4.8	
Usefulness ¹	4.5	5.0	5.0	4.5	4.5	4.6		4.7	
Use in future? yes	2	2	1	2	2		5		9
no									
not answered									
39. WHO, International Code of Marketing of Breastmilk Substitutes									
Did not read	1								1
Length: too long									
just right	1	3	4	1	2		7		11
too short									
not answered	1			1			1		2
Ease of reading ²	4.0	4.7	4.8	5.0	4.5	4.8		4.6	
Usefulness ¹	4.5	4.7	5.0	5.0	4.5	4.9		4.8	
Use in future? yes	2	2	4	2	2		8		12
no									
not answered		1							1

	Nutr	Nurs	Ped	Ob	Oth Phys	Physician		Group	
						Avg	Tot	Avg	Tot
40. WHO/UNICEF, Protecting, Promoting & Supporting Breastfeeding: the Special Role of Maternity Services									
Did not read	1		1				1		2
Length: too long									
just right	1	3	3	1	2		6		10
too short									
not answered	1			1			1		2
Ease of reading ²	4.5	5.0	5.0	5.0	4.5	4.9		4.8	
Usefulness ¹	4.5	5.0	5.0	5.0	4.5	4.9		4.8	
Use in future? yes	2	3	3	2	2		7		12
no									
not answered									
41. WHO, The Growth Chart — A Tool for Use in Infant and Child Health Care									
Did not read	2			1			1		3
Length: too long									
just right		3	4	1	2		7		10
too short									
not answered	1								1
Ease of reading ²	4.0	5.0	4.8	5.0	4.5	4.7		4.7	
Usefulness ¹	4.0	5.0	4.8	5.0	4.5	4.7		4.7	
Use in future? yes	1	2	4	1	2		7		10
no									
not answered		1							1
42. WHO, Weaning from Breast Milk to Family Food. A Guide for Health and Community Workers									
Did not read	1	2	1	1			2		5
Length: too long									
just right	1	1	3	1	2		6		8
too short									
not answered	1								1
Ease of reading ²	4.5	5.0	4.7	5.0	4.5	4.7		4.7	
Usefulness ¹	4.5	5.0	4.7	5.0	4.5	4.7		4.7	
Use in future? yes	2	1	2	1	2		5		8
no									
not answered			1				1		1

	Nutr	Nurs	Ped	Ob	Oth Phys	Physician		Group	
						Avg	Tot	Avg	Tot
43. WHO, Women, Work & Breastfeeding (draft)									
Did not read	1	1	1				1		3
Length: too long		1							1
just right	1	1	3	1	2		6		8
too short									
not answered	1			1			1		2
Ease of reading ²	4.5	4.5	5.0	5.0	4.5	4.9		4.7	
Usefulness ¹	4.5	4.5	5.0	5.0	4.5	4.9		4.7	
Use in future? yes	2	2	3	2	2		7		11
no									
not answered									
44. Worthington-Roberts & Williams, Nutrition in Pregnancy & Lactation									
Did not read	2	2	1	1			2		6
Length: too long									
just right	1	1	3	1	2		6		8
too short									
not answered									
Ease of reading ²	5.0	5.0	5.0	5.0	4.5	4.8		4.9	
Usefulness ¹	5.0	5.0	4.7	5.0	4.5	4.7		4.8	
Use in future? yes	1	1	3	1	2		6		8
no									
not answered									
45. Teal. Reprint Collection									
Did not read	2	1		1			1		4
Length: too long	1		1	1	2		4		5
just right		2	1				1		3
too short			1				1		1
not answered			1				1		1
Ease of reading ²	4.0	5.0	5.0	4.0	4.5	4.5		4.6	
Usefulness ¹	5.0	5.0	5.0	4.0	4.5	4.6		4.8	
Use in future? yes	1	2	2		2		4		7
no									
not answered			2	1			3		3

	Nutr	Nurs	Ped	Ob	Oth Phys	Physician		Group	
						Avg	Tot	Avg	Tot
MISCELLANEOUS IMPORTANT MATTERS									
46. Course Syllabus									
Ease of reading ²	4.7	5.0	5.0	5.0	5.0	5.0		4.9	
Usefulness ¹	5.0	5.0	4.3	5.0	5.0	4.7		4.8	
47. The English Language									
Understandability ¹	4.3	4.3	5.0	5.0	5.0	5.0		4.7	
Ease of reading ²	5.0	4.7	5.0	5.0	5.0	5.0		4.9	
Ease of Speaking ⁵	4.3	3.3	5.0	5.0	5.0	5.0		4.5	
48. Hotel Accommodations									
Adequacy ⁶	4.3	5.0	4.0	5.0	5.0	4.0		4.6	
Use in future? yes	3	3	2	2	2		6		12
no			1				1		1
not answered			1				1		1
49. Local transportation									
Buses	adequate	3	2	1		2		3	8
	not adequate			2	1			3	3
	not answered		1	1	1			2	3
Taxis	adequate		1	1				1	2
	not adequate								
	not answered	3	2	3	2	2		7	12
Hotel van	adequate	2	3	3	2	2		7	12
	not adequate			1				1	1
	not answered	1							1
OVERALL EVALUATION									
50. Usefulness of providing this program to multidisciplinary teams¹									
	5.0	5.0	4.8	5.0	5.0	4.9		4.9	
51. Increase in knowledge⁷									
	4.3	5.0	4.5	5.0	5.0	4.8		4.7	
52. Recommendation for this program to be provided for other health professionals from developing nations									
yes	3	3	4	2	2		8		14
no									
not answered									

	Nutr	Nurs	Ped	Ob	Oth Phys	Physician		Group		
						Avg	Tot	Avg	Tot	
General rating for this program	excellent	1	3	3	2	2		7		11
	very good	2		1				1		3
	good									
	fair									
	poor									

APPENDIX 6
Team Program Plans

**SOUTHERN ISLANDS MEDICAL CENTER AS
SUB-NATIONAL CENTER
FOR LACTATION MANAGEMENT EDUCATION AND TRAINING**

Dr. Ma. Margarita M. Galon (DOH)

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**Southern Islands Medical Center
Cebu City, Philippines**

I. BACKGROUND INFORMATION

Location: Region 7, Central Visayas

Profile of Region: Population 4,616,046
(Please see Annex)

Provinces: Bohol
Cebu
Negros Oriental
Siquijor
(Please see Annex)



Natality by Place and Attendance at Birth (Please see Annex)

Births, Total Deaths, Perinatal Deaths (Please see Annex)

Infant Mortality, Leading Causes, Number and Rate (Please see Annex)

Number of Government Hospitals in the Region:	39
Bohol:	11
Cebu:	18
Negros Oriental:	8
Siquijor:	2

SIMC Profile:

- A teaching-training government hospital, nationally funded.
- 450 bed capacity.
- 589 personnel complement.
- Three major divisions:
 - Professional Medical Staff: 127 doctors
 - Nursing: 287 nursing personnel
 - Hospital Support: 145
- Annual births: 5,000
<2,500 gms: 14%
- C-section deliveries: 14%
- Postpartum stay — Normal deliveries: 2 days
C-section: 4 days
- Breastfeeding choice — Normal deliveries: 95%
C-section: 90%
- Post discharge follow-up:
 - Mother — Normal deliveries: 2 weeks
C-section: 1 week
 - Baby — Normal deliveries: 2 - 3 days
High risk: 1 day after discharge

Staffing Pattern:	MD's	Nurses	Midwives
Labor, DR, and Postpartum Newborn Nursery (High Risk)	Residents - 10 Medical Specialist I - 4 Residents - 3 Medical Specialist I - 1	8 4	6

Hospital procedures:
 Newborn care — Normal deliveries: Rooming-in 2 hours
 High risk: at High Risk Nursery then 4 hours after, room-in depending on MD's evaluation
 Mothers — Normal deliveries: routine postpartum care
 C-section: at high risk ward

Infant feeding policies/procedures:
 Immediate latching on
 Breastfeeding upon rooming-in
 No pre-lacteal feeds
 No supplements, e.g., vitamins
 Prohibited: formula, feeding bottles, teats/pacifiers
 Breastfeeding counseling and education
 No discharge without lactation
 Postpartum breastfeeding follow-up

Current training:
 LMET: July and September 1990
 MD's: 25
 Nurses: 30
 Midwives: 5
 Perinatal care responsibility: IEC, motivation, follow-up on breastfeeding in respective areas of responsibility
 Other relevant activities:
 Mothers classes
 Breastfeeding promotion
 Research activities: none, still to be undertaken

II. PROBLEMS

1. Inadequate number of trained staff on breastfeeding.
2. No mother and child rooms for:
 - a. high risk neonates,
 - b. outside deliveries (mothers admitted for postpartum problems), and
 - c. re-admitted mothers with postpartum problems.
3. Undetermined duration of breastfeeding after hospital discharge.
4. Inadequate nutrition counseling/support for mothers.
5. Faulty weaning practices.
6. Non-advocacy of breastfeeding in the provincial, district hospitals and in the community level due to:
 - a. lack of health workers knowledge on breastfeeding, and
 - b. uninformed community on the benefits/advantages of breastfeeding.

The proposed program will address all above problems for the effective promotion/protection/support of breastfeeding.

III. GOAL AND OBJECTIVES

A. GOAL: The promotion, protection, and support of breastfeeding in SIMC and Region 7.

Utilizing the baseline data that will be obtained and through a series of scheduled training sessions, the program aims to increase by 30% the 4 - 6 month duration of exclusive breastfeeding among mothers in SIMC and the community within Region 7 by the end of three years; thereafter sustain breastfeeding advocacy.

B. OBJECTIVES

1. Phase I: SIMC Lactation Center

- a. To conduct two 40-hour training sessions for SIMC co-trainers and selected clinical instructors from colleges of nursing and schools of midwifery in Cebu by the end of December, 1991.
- b. To establish in SIMC functional clinical areas promotive of breastfeeding on the last week of January, 1992.
- c. To determine through research the duration of exclusive breastfeeding among discharged mothers during the period August to October 1991 and thereafter, annually from January to December.
- d. To strengthen nutrition education to pregnant, postpartum, lactating mother, and others through regular counseling and mothers' classes.
- e. To intensify hospital-wide breastfeeding IEC to include mothers and extended families for a period of six months, sustaining thereafter, breastfeeding advocacy.

2. Phase II: Region 7 LMET Program

To increase by 85% breastfeeding KAS of RHO-7 provincial and district hospital personnel through fifteen 40-hour training sessions from February 1992 to June 1994.

IV. STRATEGIES AND ACTIVITIES

A. STRATEGIES

1. Phase I: SIMC Lactation Center

- a. LMET co-trainers training:
 - 6 MD's
 - 12 nurses
 - 5 midwives
 - 5 nutritionists
 - 8 clinical instructors (1 each from the 8 colleges of nursing in Cebu)
 - 6 MD's, 5 nurses, and 5 midwives from Cebu's schools of midwifery
- b. Provision of mother-child rooms for:
 - High risk neonates
 - Readmitted mothers with postpartum problems
 - Outside deliveries with postpartum problems

- c. Provision of breastfeeding room for exclusive breastfeeding employees
 - d. Survey research on duration of exclusive breastfeeding from August 1, 1991 to October 31, 1991 and thereafter, annually from January to December.
 - e. Provision of IEC materials to mothers in the OB and Peds Wards, Pre-Natal Clinic, Under 5 Clinic, and community/district health centers.
 - f. Mass media support: print, broadcast, and television.
 - g. Creation of: Hospital-based support system
Hospital ↔ community-based support system
(BIBB: Breast Is Best Brigade)
2. Phase II: Region 7 LMET Program
 - a. Coordination with MCH providers in public health.
 - b. Training of 302 field unit hospital staff.
 3. Phase III: Evaluation of Program

B. ACTIVITIES

1. Phase I: SIMC Lactation Center
 - a. Update existing training syllabus.
 - b. Conduct two 40-hour training sessions.
 - c. Identification of site for employee breastfeeding room and mother-child room.
 - d. Renovation/setting-up of mother-child room.
 - e. Guide survey research on duration of exclusive breastfeeding.
 - f. Regular bi-weekly nutrition counseling by nutritionists and mothers' class by nurses:
 - Every Tuesday and Thursday at the OB and Peds Wards.
 - Every Monday, Wednesday, and Friday at the Pre-Natal and Under 5 Clinics.
 - g. Breastfeeding posters; distribution of breastfeeding brochures, flyers, and leaflets in strategic places in the hospital; breastfeeding promotion video in the OB Ward, and Pre-Natal and Under 5 Clinics.
 - h. TV program, "Lingkod Bayan," breastfeeding guest interviews.
 - i. Philippine Information Agency (PIA) "Kapihan" guest breastfeeding discussions.
 - j. Organizational meetings for a hospital-based BIBB (Breast Is Best Brigade) support system.

2. Phase II: Region 7 LMET Program

- a. Through RHO-7, lead conference with Provincial Health Officers, Chiefs of Hospitals, and City Health Officers, on the promotion, protection, and support of breastfeeding.
- b. Conduct 15 LMET 40-hour sessions for 20 participants each, every second week of:

February 1992	December 1992	October 1993
April 1992	February 1993	December 1993
June 1992	April 1993	February 1994
August 1992	June 1993	April 1994
October 1992	August 1993	June 1994
- c. Conduct monitoring visits to assess program's progress.

V. ORGANIZATIONAL ARRANGEMENTS

The organizations involved will be the following:

- The Central Office, Department of Health, for the official designation of SIMC as Sub-National Center for LMET, Visayas Region, and for representation with USAID and UNICEF for fund support.
- UNICEF for funding support.
- USAID for funding support, construction of Child Survival Center is underway.
- WHO for funding support.
- Wellstart for consultation and other technical support/follow-up.
- Regional; Health Office and the Cebu City Health Department for the team to conduct LMET to health personnel in the field units.
- Philippine Information Agency (PIA) for media assistance.
- Kapisanan Ng Mga Broadcasters Sa Pilipinas for media assistance.

VI. STAFF

- Breastfeeding Program Committee: Medical, Nursing, Hospital Support.
- Wellstart team as Core Trainers.
- Co-Trainers (in concurrent capacities):

<u>Didactic Classes and Clinical Experiences</u>	
OB: Medical Specialist I:	2
Peds: Medical Specialist II:	2
Nurse VI:	1
Nurse III:	2

Clinical Areas

Nurse II: 3 OB
 2 Peds
 1 Pre-Natal
 1 Under 5 Clinic

Nurse I: 2 OB-Peds

VII. EVALUATION

The program will be assessed according to the degree of attainment of objectives within the time lines projected. It will be conducted by the Wellstart (Core) Team utilizing the budgeted resources available. Evaluation will be formative and summative as follows; the results will determine the impact of the program and will be utilized as a basis for program expansion, other research projects, and health care planning.

OBJECTIVE	EVALUATION	
	FORMATIVE	SUMMATIVE
<u>PHASE I: SIMC LACTATION CENTER</u>		
To conduct two 40-hour trainings for SIMC Co-trainers and selected clinical instructors.	<ul style="list-style-type: none"> • Number of participants in 1st and 2nd sessions. • Day-to-day evaluation during the training on problems/constraints encountered utilizing a daily evaluation checklist. 	<ul style="list-style-type: none"> • Overall outcome of training on the participants. • Total number trained. • Initial improvement on breastfeeding practices in SIMC. <p>To be done: 3rd week, December, 1991</p>
To establish functional clinical areas promoting breastfeeding.	<p>Weekly progress inspection of the renovation identified clinical areas for:</p> <ul style="list-style-type: none"> • Mother-child room, and • "I Eat At Mom's" room 	By the last week of January 1992: Mother-child room and "I Eat At Mom's" rooms fully functioning.
To determine through research the duration of exclusive breastfeeding among discharged mothers for the period August to October 1991, and annually thereafter.	Follow-up survey of research on duration of breastfeeding	By the end of September 1991: <ul style="list-style-type: none"> • Survey complete, baseline data obtained. • Annual survey/follow-up to be done.
To strengthen nutrition education to pregnant, postpartum, lactating mothers...	Post-nutrition counseling and post-mothers' class interview/feedback of mothers.	85% compliance of mothers evidenced by: <ul style="list-style-type: none"> • Their return on appointed dates. • Improvement/progress on nutrition status, weight gain/loss.
To intensify hospital-wide BF IEC to include mothers and their extended families.	<ul style="list-style-type: none"> • Follow-up of IEC materials posted. • Assessment of impact on mothers/viewers through casual feedback interviews. 	Breastfeeding advocacy by SIMC employees, OB-Peds, Pre-Natal, and Under 5 Clinic clients/mothers.

OBJECTIVE	EVALUATION	
	FORMATIVE	SUMMATIVE
PHASE II: REGION 7 LMET PROGRAM		
To increase by 85% breastfeeding KAS of RHO-7 provincial and district hospital personnel.	<ul style="list-style-type: none"> • Number of participants in each session. • Daily evaluation of training sessions through use of checklist. 	<ul style="list-style-type: none"> • Total of 302 RHO-7 staff trained. • Improvement of breastfeeding practices in the community. • 20% exclusive breastfeeding at 4-6 months duration.

PHASE III: OVERALL EVALUATION: IMPACT OF PROGRAM

- SIMC:**
- Reduced operational costs, nursery unit.
 - Cost saving effects on oxytocics purchase.
 - Sustained breastfeeding advocacy
 - Increased duration of exclusive breastfeeding for 4 - 6 months.
- REGION 7:**
- Increased duration of breastfeeding for 4-6 months.
 - Sustained breastfeeding advocacy.
 - Reduction of morbidity from diarrheal diseases, ARI, urinary tract infections, and Vitamin A & D deficiency.
- FAMILY:** Savings from:
- medical/hospitalization expense on infant's illnesses.
 - purchase of prohibitively priced formulas.
- OTHERS:** Birth spacing (lactational amenorrhea).

VIII. RESOURCES NEEDED

1. **Personnel**
 - Core Group
 - Breastfeeding Program Committee (Medical, Nursing, and Administrative staff)
2. **Physical Facilities**
 - Conference room
 - Telephone
 - Mother & Child room
 - Employee's breastfeeding room
 - Handwashing facilities
3. **Equipment and Supplies**
 - Refrigerator
 - TV
 - VHS VTR
 - Overhead projector
 - Slide projector

4. Teaching Materials
 - Slides and transparencies
 - Tapes (video and cassette)
 - Handouts
 - Reference books
 - Posters
 - Mother's booklets
5. IEC Materials for Mothers
 - Leaflets/posters
 - Tapes

IX. BUDGETARY REQUIREMENTS FOR SIMC LACTATION CENTER PROGRAM*

1. Equipment	₱ 416,000.00
II. Personnel and Operating Expenses	
Phase I	₱ 894,780.00
Phase II	₱ 2,567,680.00
TOTAL	₱ 3,878,460.000
	(\$ 143,646.66)

*To be secured from foreign funding agency.

A. EQUIPMENT REQUIREMENT

1. Electric typewriter	₱ 25,000.00
2. Computer and printer	50,000.00
3. Slide projector	40,000.00
4. Overhead projector	25,000.00
5. Scanner	45,000.00
6. Mimco machine	45,000.00
7. Xerox machine	70,000.00
8. Binder	20,000.00
9. Puncher	5,000.00
10. Telephone	3,000.00
11. Refrigerator	10,000.00
12. TV 20" (3 x ₱14,000.00)	42,000.00
13. VHS VCR (3 x 12,000.00)	36,000.00
TOTAL EQUIPMENT	₱ 416,000.00

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B. PHASE I

Summary for Budgetary Requirement for Phase I

A. TRAINING/IEC	
1. Honorarium	₱ 30,000.00
2. Transportation	15,000.00
3. Board and lodging	26,000.00
4. Materials/supplies	15,390.00
5. Miscellaneous	10,000.00
Total per course:	96,390.00
₱ 96,390.00 x 2 courses	₱ 192,780.00
B. RESEARCH	₱ 702,000.00
	894,780.00

Breakdown of the Budget Requirement/Personnel and Operating Expenses for the SIMC Lactation Management Education Program

A. TRAINING/IEC	
1. Honorarium	
Speakers: 5 x 8 = 40 hrs x ₱300.00/hr	₱ 12,000.00
Facilitators: 6 x 5 x 200	6,000.00
Clerical: 2 x 7 days x 150	2,100.00
Utility: 2 x 5 x 100	1,000.00
Total Honorarium	₱ 21,100.00
2. Transportation	
Speakers: 3 x 4,000	₱ 12,000.00
Others	3,000.00
Total Transportation	₱ 15,000.00
3. Board and Lodging	
Speakers lodging: 3 x 500 x 2 days	₱ 3,000.00
Board/food: 23 x 200 x 5	23,000.00
Total Board and Lodging	₱ 26,000.00

4. Materials/Supplies	
Mimeo paper: 5 x 100	₱ 500.00
Xerox paper: 3 x 150	450.00
Stencil: 2 boxes x 100	200.00
Ink (Mimeo & Xerox)	1,500.00
Brown paper	300.00
Diskettes/Slides	2,000.00
Notebooks: 20 x 20	400.00
Pencils: 20 x 2.00	40.00
Transparencies: 200 x 20	4,000.00
Computer Paper	1,000.00
Folder/Tags Pens Folder Yellow Pads Other	5,000.00
Total Materials/Supplies	₱ 15,390.00
5. Miscellaneous/Other Costs	₱ 10,000.00
Total per course	₱ 87,490.00
x 2 courses	2
TOTAL TRAINING/IEC	₱ 174,980.00
B. RESEARCH	
1. Personnel Services	
Salary and allowances:	
4 x 4,000/person x 3 months	₱ 48,000.00
4 x 4,000/24 months	384,000.00
Total Personnel Services	₱ 432,000.00
2. MOOE	
Transportation and per diems	₱ 150,000.00
Materials/supplies	100,000.00
Miscellaneous	20,000.00
Total MOOE	₱ 270,000.00
TOTAL RESEARCH	₱ 702,000.00

C. **PHASE II**
 Summary of the Budgetary Requirement for Personnel and Operating Expenses for Phase II.

1. Conference with top health officials	₱ 76,500.00
2. Lactation Workshop, per training	₱ 123,100.00
Subtotal, Conference and Workshop	₱ 199,600.00
3. Subsequent Workshops	₱ 2,068,080.00
123,100 x 14	
1,723,400	
Inc. 344,680	
₱ 2,068,080	
4. Monitoring of Re-entry Programs	₱ 300,000.00
TOTAL	₱ 2,567,680.00

A. CONFERENCE WITH PHO, CHO, COH, RHO TECH STAFF	
1. Transportation	
50 x 300	₱ 15,000.00
2 x 5,000	10,000.00
Other	5,000.00
2. Food: 55 x 200	11,000.00
3. Lodging: 50 x 200 x 2 days	20,000.00
4. Materials/supplies	10,000.00
5. Rental conference room	500.00
6. Other costs: communication	3,000.00
7. Miscellaneous	2,000.00
TOTAL	₱ 76,500.00
B. COST/TRAINING: Phase II — Lactation Program	
1. Honorarium	₱ 21,100.00
2. Transportation	28,000.00
3. Board and lodging	38,000.00
4. Materials/supplies	18,000.00
5. Rental conference room	5,000.00
6. Other costs	3,000.00
Subtotal/training	₱ 113,100.00

Budget Requirement/Course

1. Honorarium	
Speakers: 5 x 8 = 40 hrs x ₱ 300/hr	₱ 12,000.00
Facilitators: 6 x 5 days x 200	6,000.00
Clerical: 2 x 7 days x 150	2,100.00
Utility/Driver: 2 x 5 x 100	1,000.00
	₱ 21,100.00
2. Transportation Expenses	
Speakers: 3 x 4,000	₱ 12,000.00
Participants: 20 x 300	6,000.00
Others (within training prd.)	10,000.00
	₱ 28,000.00
3. Board and Lodging	
Lodging	
Speakers: 3 x 500 x 2 days	₱ 3,000.00
Participants: 20 x 200 x 7	28,000.00
Secretariat/Support: 5 x 200 x 7	7,000.00
Board/food: 25 x 200 x 7 days	₱ 35,000.00
	₱ 73,000.00
4. Materials/Supplies	
Brown paper	₱ 500.00
Mimeo paper: 8 reams x 100	800.00
Xerox paper: 5 reams x 150	750.00
Stencil: 5 boxes x 100	500.00
Ink — Mimeo and Xerox	2,000.00
Diskettes/slides	3,000.00
Notebook: 20 x 20	400.00
Pencils: 25 x 2.00	50.00
Tags: 30 x 3.00	90.00
Folders: 30 x 15.00	450.00
Pentel pens, board pen: 24 x 20.00	480.00
Yellow pads: 20 x 25	500.00
Transparency pens: 24 x 20.00	480.00
Computer paper	1,000.00
Computer ribbon	500.00
Transparencies: 200 x 20.00	4,000.00
Other miscellaneous	2,000.00
	₱ 17,500.00

5. Rental	
Conference room: 500 x 5	₱ 2,500.00
6. Other costs (communication: telephone, postage, telegram)	₱ 3,000.00
7. Miscellaneous	₱ 10,000.00
TOTAL BUDGET/COURSE	₱ 155,100.00

C. MONITORING OF RE-ENTRY PROGRAMS

Travel, per diem, and allowances ₱ 300,000.00

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ANNEX

TABLE 1: POPULATION BY PROVINCE AND CITY
Region VII, Philippines
1990

PROVINCE/CITY	NUMBER	% DISTRIBUTION
Bohol	891,150	19.31
Cebu	1,462,794	31.69
Negros Oriental	842,829	18.26
Siquijor	82,302	1.78
Bais City	61,201	1.33
Canlaon City	35,733	0.77
Cebu City	627,124	13.59
Danao City	66,928	1.45
Dumaguete City	78,717	1.71
Lapulapu City	126,104	2.73
Mandaue City	176,065	3.81
Tagbilaran City	51,288	1.11
Toledo City	113,811	2.47
T O T A L	4,616,046	100.00

TABLE 8: INFANT MORTALITY, LEADING CAUSES, NUMBER, AND RATE/1,000 LIVE BIRTHS
Region VII, Philippines
5-YEAR AVERAGE (1985-1989) AND 1990

CAUSES	5-YEAR AVERAGE (1985-89)		1990	
	NUMBER	RATE	NUMBER	RATE
1. Pneumonia	1,234	11.98	904	7.69
2. Prematurity	443	4.30	187	1.59
3. Diarrheal Diseases	216	2.10	175	1.49
4. Septicaemia	141	1.37	151	1.28
5. Congenital Anomalies	251	2.44	96	0.82
6. Heart Disease	66	0.64	68	0.58
7. Measles	33	0.32	53	0.45
8. Asphyxia Neonatorium	156	1.51	51	0.43
9. Severe Malnutrition	105	1.02	46	0.39
10. Tetanus Neonatorium	66	0.64	19	0.16

**TABLE 3: BIRTHS, TOTAL DEATHS, INFANT DEATHS,
PERINATAL DEATHS, AND MATERNAL DEATHS
Region VII, Philippines
1990**

PROVINCE/CITY	BIRTHS		TOTAL DEATHS		INFANT DEATHS		PERINATAL DEATHS				MATERNAL DEATHS	
	NO.	RATE*	NO.	RATE*	NO.	RATE*	LATE FOETAL DEATHS		EARLY NEONATAL DEATHS		NO.	RATE*
							NO.	RATE*	NO.	RATE*		
Bohol	23,864	26.78	4,970	5.58	584	24.47	168	7.04	290	12.15	17	0.71
Cebu	43,055	29.43	8,372	5.72	788	18.30	24	0.56	22	0.51	11	0.26
Negros Oriental	14,738	17.49	2,175	2.58	190	12.89	40	2.71	103	6.99	11	0.75
Siquijor	1,807	21.96	487	5.92	37	20.48	20	11.07	12	6.64	0	0.00
Bais City	2,189	35.77	243	3.97	21	9.59	3	1.37	7	3.20	2	0.91
Canlaon City	965	27.01	293	8.20	57	59.07	14	14.51	3	3.11	2	2.07
Cebu City	13,955	22.25	3,275	5.22	487	34.90	128	9.17	166	11.90	11	0.79
Danao City	2,366	35.35	478	7.14	75	31.70	40	16.91	19	8.03	0	0.00
Dumaguete City	2,189	27.81	498	6.33	46	21.01	17	7.77	31	14.16	0	0.00
Lapulapu City	3,641	28.87	629	4.99	172	47.24					2	0.55
Mandaue City	4,191	23.80	796	4.52	135	32.21	96	22.91	34	8.11	3	0.72
Tagbilaran City	1,198	23.36	215	4.19	18	15.03	2	1.67			0	0.00
Toledo City	3,385	29.74	533	4.68	106	31.31					2	0.59
TOTAL	117,543	25.46	22,964	4.97	716	23.11	552	4.70	687	5.84	61	0.52

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Province/ City	Total Births	Place of Birth								Attendance at Birth											
		Home		Hospital				Others		M.D.		Nurse		Midwife		Hilot				Others	
				Government		Private Hosp./Clinic										Trained		Untrained			
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Bohol	23,864	21,439	89.80	1,740	7.29	222	0.93	472	1.90	1,962	8.22	118	0.49	14,629	61.30	6,357	26.64	379	1.59	419	1.76
Cebu	43,055	39,652	92.10	3,217	7.47	--	--	186	0.40	3,217	7.47	253	0.59	32,676	75.89	5,685	13.20	1,038	2.41	186	0.43
Negros Oriental	14,738	13,500	91.60	1,095	7.43	130	0.88	13	0.00	1,137	7.71	62	0.42	8,306	56.36	4,322	29.33	908	6.16	3	0.02
Siquijor	1,807	1,536	85.00	271	15.00	--	--	--	--	271	15.00	23	1.27	1,470	81.35	19	1.05	24	1.33	--	--
Bals City	2,198	1,949	89.04	240	10.96	0	0.00	0	0.00	241	11.01	18	0.82	186	8.50	1,743	79.63	1	0.05	--	--
Canlaon City	965	954	98.86	0	0.00	11	1.14	0	0.00	11	1.14	1	0.10	318	32.95	574	59.48	61	6.32	0	0.00
Cebu City	13,955	6,239	44.71	2,735	19.60	4,700	33.68	281	2.00	7,359	52.73	135	0.97	3,076	22.04	2,756	19.75	508	3.64	121	0.87
Danao City	2,366	1,825	77.13	529	22.36	12	0.51	--	--	539	22.78	4	0.17	699	29.54	778	32.88	330	13.95	16	0.68
Dumaguete City	2,189	494	22.57	1,296	59.21	398	18.13	1	0.00	1,692	77.30	3	0.14	232	10.60	246	11.24	16	0.73	0	0.00
Lapu-Lapu City	3,641	2,090	54.93	--	--	673	18.48	968	26.50	524	14.39	165	4.53	1,467	40.29	1,485	40.79	--	--	--	--
Mandaue City	4,191	3,909	93.27	--	--	282	6.73	0	0.00	292	6.97	245	5.85	1,712	40.85	1,017	24.27	925	22.07	--	--
Tagbilaran City	1,198	578	48.25	536	44.74	79	6.59	5	0.43	615	51.34	31	2.59	547	45.66	5	0.42	--	--	--	--
Toledo City	3,385	2,102	62.10	--	--	1,283	37.90	--	--	1,283	37.90	41	1.21	209	6.17	1,842	54.42	--	--	10	0.30
Total	117,543	96,168	81.82	11,659	9.92	7,790	6.63	1,926	1.60	19,143	16.29	1,099	0.93	65,527	55.75	26,829	22.82	4,190	3.56	755	0.64

PROGRAM PLAN

**Dr. Hajira Hanif
Dr. Nishat Maqsood
Rukhsana Ilyas**

**Sir Ganga Ram Hospital
Fatimah Jinnah Medical College
Lahore, Pakistan**

**Dr. Khwaja Ahmad Abbas
Children's Hospital
Pakistan Institute of Medical Sciences
Islamabad, Pakistan**

I. BACKGROUND

Pakistan is a rapidly developing country with a population of 112 million. It has four provinces, Punjab being the most thickly populated with a population of 61 million. Islamabad is the capital city with a population of 1.3 million. Lahore is the capital of Punjab. Its population is 4.5 million.

The vital statistics are similar to other such developing countries. The crude death rate has fallen to 10.5 per thousand, but the birth rate remains high at 43.3 per thousand, resulting in a tremendous growth rate of 3.28%. With this rate we are likely to double our population in 23 years. The infant mortality rate is 90 per thousand which further increases the dependency ratio. The maternal mortality still remains very high, 3.8 to 6 per thousand live births.

In the last 43 years (since its independence in 1947) there has been a steady decrease in death rate due to improved medical care and preventive services (EPI, CDD, malaria control, etc.), but the birth rate has not fallen due to repeated failure of all family planning programs implemented so far. Unfortunately, they were all vertical programs and none were incorporated in the basic health systems or primary health care (PHC). Other factors contributing to the failures were religious and cultural beliefs, lack of mass health education, and to crown it all low literacy rates (26%), especially in women (16%).

Proper lactation management on modern lines, i.e., exclusive breastfeeding for six months and continuing for two years (as advocated in our religion) can help in decreasing many of our problems. Early initiation (on the delivery table) will decrease postpartum hemorrhage while exclusive prolonged breastfeeding will result in lactational amenorrhea which serves the dual purpose of child spacing and prevention of anemia in mothers. Postpartum hemorrhage, anemia, and infections are major contributors to maternal mortality. Child spacing due to lactational amenorrhea is the only culturally and religiously accepted method of family planning which is likely to affect the birth rate with very little cost.

Data on Breastfeeding

Present breastfeeding data shows that 80% of mothers breastfeed during the first year of life, and 50% in the second year. Exclusive breastfeeding is not known. Although solids are introduced quite late, non-foods like "ghutti," water, gripe water, and others are given very early in life. Breastfeeding is initiated usually on the third day.

A breastfeeding support group has been formed in Lahore. It consists of paediatricians, gynaecologists, and other paramedical staff of the three medical colleges and also some members of non-teaching hospitals.

Present Problems in Breastfeeding Practices:

1. Colostrum is not given to neonates.
2. Instead, prelacteals are given.
3. Exclusive breastfeeding is not practiced.
4. Solids are introduced late and usually inappropriate foods are selected.

These practices are commonly the result of:

1. Inconsistent information among health personnel (doctors, nurses, LHV's) due to lack of curriculum in their training period.
2. Inappropriate maternity practices in the hospitals.
3. Cultural beliefs.

4. Inadequate information in the community.

II. GOALS

To promote, support, and protect breastfeeding practice in Sir Ganga Ram Hospital Lahore (SGRH) and in specified urban and rural communities in and around Lahore.

These goals will be achieved in three phases. In the first phase the target area will be the hospital setting only (SGRH). For its full implementation a period of 18 months is proposed. However, the practices outlined will start functioning soon after the adoption of the breastfeeding policy as approved by the hospital breastfeeding committee.

The second and third phases of the program will be the extension of activities promoting and supporting breastfeeding into a specified section of an urban and a rural population, respectively.

The urban and rural extension of the project is planned in about two years time, when we hope the plan of action of Phase I has been fully implemented and the project is consolidated in the hospital premises.

III. PHASE I

Sir Ganga Ram Hospital is a 650 bedded hospital attached to Fatimah Jinnah Medical College Lahore. Apart from other specialties, it has Obstetric/Gynae and Paediatric Departments.

The Obstet/Gynae department has 120 beds with 90 maternity beds. Total number of deliveries are about 7,000 to 8,000 per year with an average of 650 deliveries per month.

As it is a referral hospital, about 30% of the patients are admitted with one or the other complications. Thus the caesarean section rate is about 20%. The high risk pregnancies in the hospital are 34%. The premature deliveries are 12% and the babies born with weight < 2,500 gms are 10%.

The normal babies are routinely roomed-in with mothers. The vaginal deliveries are discharged after 24 hours and patients with caesarean sections on the 5th postoperative day. About 60% of the patients return for their postnatal checkup and go for well baby clinic.

There are two labour rooms with many adjoining wards. The mothers and babies are shifted to wards two hours after delivery. Babies with problems are shifted to the special care unit situated in the paediatric ward in a separate building. Due to lack of space/arrangements, mothers of these babies cannot be housed near their babies, and thus breastfeeding and breastmilk is a rarity.

In the Paediatric Department there are 70 beds including a special care nursery with 15 beds.

The Preventive Paediatric Department is actively involved in teaching community, paediatric, and MCH care. It is providing primary health care facilities to the community outside the hospital.

A. OBJECTIVES

1. To sensitize and get administrative support of hospital administration and senior faculty members within four weeks of reaching home.
2. To conduct an appropriate training program on breastfeeding and lactation management for all levels of health care providers including senior teachers, resident training staff, and paramedics (including ayas) in 18 months time.
3. To obtain necessary material and equipment for the program.

4. To change hospital routines, practices, and standards of MCH care required to improve breastfeeding practices.
5. To procure required space in the postpartum section for a "Lactation Management Clinic."
6. To protect hospital practices from the ill effects of aggressive advertising of formula companies.

B. STRATEGIES

1. Strategies of Objective 1: To sensitize and get administrative support of hospital administration and senior faculty members.
 - a. To hold a meeting with hospital administrative staff within four weeks of going home.
 - b. To hold a meeting with the senior faculty members within two months.
 - c. To form a hospital breastfeeding committee in the above meeting.
 - d. To formulate a hospital breastfeeding policy based on joint statement of UNICEF/WHO within two weeks of the formation of the breastfeeding committee.
2. Strategies of Objective 2: To conduct an appropriate training program on breastfeeding and lactation management for all levels of health care providers.

The training programme is one of the most important strategies of the project. Personnel to be trained: All the relevant staff from obstetrics, paediatrics and community medicine (80 doctors and 80 nurses) will be trained in batches of 20 to 25 persons only. Each batch will consist of 10 doctors and 10 nurses. Ayaas (nursing aides) numbering about 20 will have a special course for them as most of them are illiterate but are capable of influencing the mothers' opinions one way or the other. The training curriculum and methodology is given in the appendix.

3. Strategies of Objective 3: To obtain necessary material and equipment for the program.
 - a. Supplies and equipment already available:

A conference room with audiovisual aids located in the undergraduate medical college will be utilized initially until the project has its own audiovisual aids, a list of which is given below.
 - b. Requirement of teaching aids:
 - Overhead projector
 - Slide projector
 - TV
 - VCR
 - Telex Caramate 4000
 - Screens
 - Posters
 - Booklets
 - Models
 - Software (tapes, slides, etc.)

c. Stationery

- Growth cards
- Mother cards (discharge cards)
- Registers

d. Equipment

- Electric breast pump 1
- Computer and printer 1
- AC for computer room 1
- Typewriter 1
- Photocopier 1
- Baby weighing scales 2
- Height and weight machine 2

4. Strategies for Objective 4: To change hospital routines, practices, and standards of MCH care.

Hospital routines and practices will be set according to the hospital policy.

Structure and functioning of services:

a. Antenatal period

To the already existing antenatal examination, the following protocol will be added:

- Examination of breasts
- Intention to breastfeed
- Previous breastfeeding history
- Whether previous children breastfed — for how long?
- Problems encountered in previous breastfeedings — what kind?
- Type of help she received — from whom?
- Has she attended the antenatal class held in the OPD? Health education class on breastfeeding, weaning, maternal nutrition, etc. is held in the OPD twice a week.

b. Intrapartum period protocol

- Mother to be prepared in first stage of labour so as to put the baby to the breast on the delivery table.
- Baby to be put to breast within 10 minutes to ½ hour on the delivery table.
- For C-sections, epidural anesthesia will be encouraged whenever possible.
- C-section baby will be put to breast within 6 hours after coming round.

c. OB ward protocol

- Rooming-in (which is already being practiced).
- Exclusive breastfeeding.
- No prelacteal feeds such as water, honey, or ghutti to be given to neonates.
- Feeding on demand or every 2 hours, but not less than 8 to 12 times in 24 hours.

d. Protocol for discharge

- Detailed instructions on exclusive breastfeeding for six months.
- Feeding on demand or every two hours to continue.
- Advice to mothers about diet and rest during lactation.
- Postpartum follow-up on 7th day in lactation management clinic.
- Revisit at 6 weeks, 10 weeks, and 14 weeks at lactation management clinic, where postpartum examination, immunization, and lactation will be combined.

5. Strategies for Objective 5: To procure required space in the postpartum section for a "Lactation Management Clinic."

Procurement of space for lactation management clinic in postpartum area. The administrator of the hospital will be requested to procure an area near the obstetric ward for a lactation management clinic. Until such time, lactation activities will be carried out in the department of preventive pediatrics.

6. Strategies for Objective 6: To protect hospital practices from the ill effects of aggressive advertising of formula companies.

- a. Formula companies will not be allowed to approach the mothers directly.
- b. Hospital premises will not be used for advertizing by putting up posters, calendars, stickers, etc.
- c. Free samples of infant formulas will not be supplied to the neonatal nursery and obstetric wards as donations.
- d. Free gifts will not be accepted by doctors, nurses, or other staff.
- e. Equipment, printed matter, and research grants will not be accepted by the faculty members of medical school or hospital.

C. EVALUATION

Evaluation of Phase I will be done a year after its full implementation according to the following parameters.

1. Percentage of mothers exclusively breastfeeding:

- a. On discharge from hospital.
- b. At six weeks.
- c. At ten weeks.
- d. At 14 weeks.

2. Assessment of mothers' knowledge about breastfeeding (use of colostrum, exclusivity, and duration of lactation, weaning foods, and about importance of maternal diet in pregnancy and lactation.

3. Assessment of activities in labour room:

- a. Number of babies put to the breast on the delivery table.
- b. Assessment of the number of bottles and pacifiers in the wards.

IV. PHASES II AND III

Phases II and III will be an extension of the activities to promote, support, and protect breastfeeding practices in the urban and rural areas. The urban community consists of a small locality situated about seven miles away from the hospital. The population is comprised of about 10,000 people living in 160 households. They belong to the lower middle class with an adequate provision of water supply and electricity. However, sanitation is poor with open drains. The health facilities in this area consist of two MCH centres, each providing primary health care through a team of:

- One visiting doctor,
- Two LHV's/public health nurses,
- Four TBA's, and
- Eight TBA's (in private practice).

The disease and health problems are similar to the rest of the community.

As emphasized already, breastfeeding is practiced by a vast majority of women in the community. However, the quality of this practice is far from ideal.

The main thrust of these phases will be to improve the quality of breastfeeding and weaning practices in the community. Special emphasis will be given to:

1. Adequate nutrition and appropriate antenatal care for pregnant women.
2. Safe conduct of deliveries and appropriate care in the postpartum period.
3. Referral of high risk mothers to the hospital.
4. Initiation of breastfeeding soon after delivery, use of colostrum, and abolishing the use of all prelacteal feeds.
5. Exclusive breastfeeding for six months.
6. Maintenance of breastfeeding along with weaning for two years.

Traditional birth attendants who are already working in these communities will be chosen to carry out the above mentioned objectives. The work of the TBA's will be supervised by lady health visitors who are already working in the MCH centres located in these communities.

The overall responsibility of supervision of the community project will be given to MCH physicians and medical officers working in the Preventive Paediatric Department of SGRH.

For the above mentioned categories of health workers, appropriate training courses will be conducted on the same principles given in Phase I. After their formal courses in the hospital, these workers will continue to have "hands on training" in the field areas.

The trained TBA's and LHV's will be supplied with a delivery kit to be obtained from an appropriate source.

Curriculum for training of TBA's will be the same as conducted by the health department with special emphasis.

The third phase of the program will be conducted in a village situated 15 miles away from Lahore, with a population of 10,000 people. They are mostly farmers with small land holdings or labourers working in Lahore. They belong to a lower economic class. There is no water supply system. The villagers use wells

and hand pumps. Water is brought and stored in large earthen pitchers. The sanitation services are non-existent. Garbage is thrown on the streets.

Health care services are meagre. There is one basic health unit for primary health care. However, the scope of its work is very limited. It is manned by a doctor, a paramedic, and a helper. About eight to ten TBA's are working on their own.

V. BUDGET

1. Supplies and Equipment	
Toyota Hiace	\$ 40,000
Overhead projector	2,000
Slide projector	3,000
TV	800
VCR	800
Telex Caramate 4000	1,000
Screens (2)	200
Posters (12)	500
Booklets (100)	500
Models	1,000
Software	1,000
Stationery	1,000
Electric breastpump (1)	1,000
Computer & printer (1)	6,000
AC for computer room (1)	1,000
Electric typewriter (1)	500
Photocopier (1)	2,000
Baby weighing scales (6)	2,400
Height & weight machine (4)	3,200
Total supplies and equipment	\$ 67,900
2. Personnel	
Physicians (2, per annum)	\$ 5,000
Typist (2, per annum)	2,000
Lactation counsellors (6, per annum)	6,000
Driver (1, per annum)	600
Total personnel	\$ 13,600
3. Honorarium and per diem	
a. Per diem for trainees	
TBA's (total)	\$ 1,500
LHV's (total)	1,500
b. Honorarium for teachers (\$500 x 6)	3,000
Total honorarium and per diem	\$ 6,000
TOTAL BUDGET	\$ 87,500

ANNEX 1

Lactation Training Programme for Doctors, Nurses

Curriculum Topics:

1. Benefits of Breastfeeding for Mother and Baby.
2. Biology of Human Lactation (Anatomy, Physiology, and Endocrinology)
3. Nutritional and Immunological Excellence of Human Milk.
4. Principles of Successful Lactation.
5. Recognition, Cause, and Management of Lactation Problems.
6. Jaundice in the Newborn: Its Relationship to Breastfeeding.
7. Hospital Breastfeeding Policy, The Marketing Code for Formula Manufacturers.
8. Hazards of Bottle Feeding.
9. Maternal Nutrition During Pregnancy and Lactation.
10. Drugs and Lactation.
11. Weaning, Complimentary Feeding.
12. Lactation and Birth Spacing.

Methodology

1. Lecture-discussion.
2. Video.
3. Slide sets (TALC).
4. Models.
5. Ward Rounds, Lactation Management Clinic (Case demonstration).

The training courses will be held every two months. Each course will have about 20 participants consisting of both doctors and nursing staff from Obstetric, Paediatric, and Community Medicine Departments. Each course will run for four days.

LACTATION MANAGEMENT CLINIC IN A CHILDREN'S HOSPITAL

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I. INTRODUCTION

Women in Pakistan in general still maintain a "breastfeeding culture." A large majority of them initiate breastfeeding and maintain it for more than a year or so. ()

However, the quality of breastfeeding promotion is not optimum: Colostrum is not given and instead, prelacteal feeds are administered which are non-nutritive and contaminated. When eventually the breastfeeding is started on the second or third day (), it is usually not exclusive. Additional foods in the form of diluted fresh cow's milk or powdered formula are added to the baby's diet from early weeks of life (). Use of pacifiers is common place (). Most of the babies, at our clinic or another, are given herbal preparations, homemade decoctions, tea, or other preventives for "colic" and for "improving digestion." Use of "gripe water" is very common.

The overall effect of these practices are recurrent infections and decline in the number of breastfeeds given to the baby. The strong protective effects of human milk against infections, its nutritional excellence, and birth spacing effects are undermined. This is one of the main reasons why we have such a high infant mortality and morbidity which could largely be prevented if the newborns were given colostrum starting soon after birth, instead of prelacteal feeds, and if the breastfeeding was practiced exclusively* for the first 4 - 6 months of life.

This it is supposed to be a biological function which has to be learned (), breastfeeding comes naturally to our lactating mothers most of whom manage to breastfeed successfully with few problems. But what of those who do have a problem? In the urban group of women who have been influenced by the "bottle," lactation failure is not uncommon. They are also likely to suffer from lactation problems such as sore nipples, engorged breasts, mastitis, etc.

The role of health professionals and the health care providers, in this respect has by and large been negative or at best indifferent. Unwittingly, many paediatricians and obstetricians along with nursing personnel, have promoted bottle feeding. Breastfeeding is hardly ever mentioned during the whole of the antenatal period or at the time of delivery. Most of the maternity departments receive free donations of formula _____.

One important reason why many health care providers are insensitive to the issue of breastfeeding is their lack of knowledge and skill in the art and science of breastfeeding. Lactation is given little time during obstetric training; it may however get some attention in the paediatric training programmes both at the undergraduate and postgraduate level, but this is not enough.

Most of the doctors and nursing working in paediatric and obstetrics departments in MCH and in general practice who come in contact with neonates and infants may be vaguely aware that breastmilk is good, but are incapable of helping mothers who are having problems with lactation and feeding their babies their own milk.

In fact, a mother who has a strong desire to breastfeed but is having problems may wonder who to approach for help. We don't have lactation counsellors. In general the advice from a health care provider in his situation would be use of a formula.

II. OBJECTIVES

With this background, a Lactation Management Clinic was started in May 1989, at the Children's Hospital PIMS Islamabad. It had the following objectives:

Objectives of LMC

1. To encourage individual mothers to sustain exclusive breastfeeding for 4 - 6 months and to continue for as long as possible thereafter, preferably for two years.

2. To give nutritional and dietary advice to lactating and pregnant mothers and to impress upon them the uniqueness of breastfeeding as the best feeding option with its optimum nutritional, immunological, psychological, and economic advantages; and to remove misconceptions about breastmilk and to discourage use of bottles, pacifiers, and non-nutritious foods, e.g. gripe water, tea, ghutti, etc.
3. To instruct mothers to use (culturally and economically) appropriate complementary foods (weaning diets) after 4 - 6 months of age of the baby, along with breastmilk.
4. To help mothers who wish to breastfeed but are having difficulty in breastfeeding and/or maintaining lactation or are suffering from some breast pathology related to breastfeeding.
5. To collect information and compile data and to conduct anthropological and scientific research on breastfeeding and lactation.
6. To promote, support, and protect breastfeeding practices and to raise its awareness both in the public and professional mind.

III. MATERIALS AND METHODS

- Location of clinic, physical inputs, etc.
- Personnel (staff)
- Training
- Referral: where the patient come from (OPD, wards, NICU, self, private hospital)
- History taking, exam, and assessment (Annex) according to proforma
- Management

Results

Discussion

Recommendations

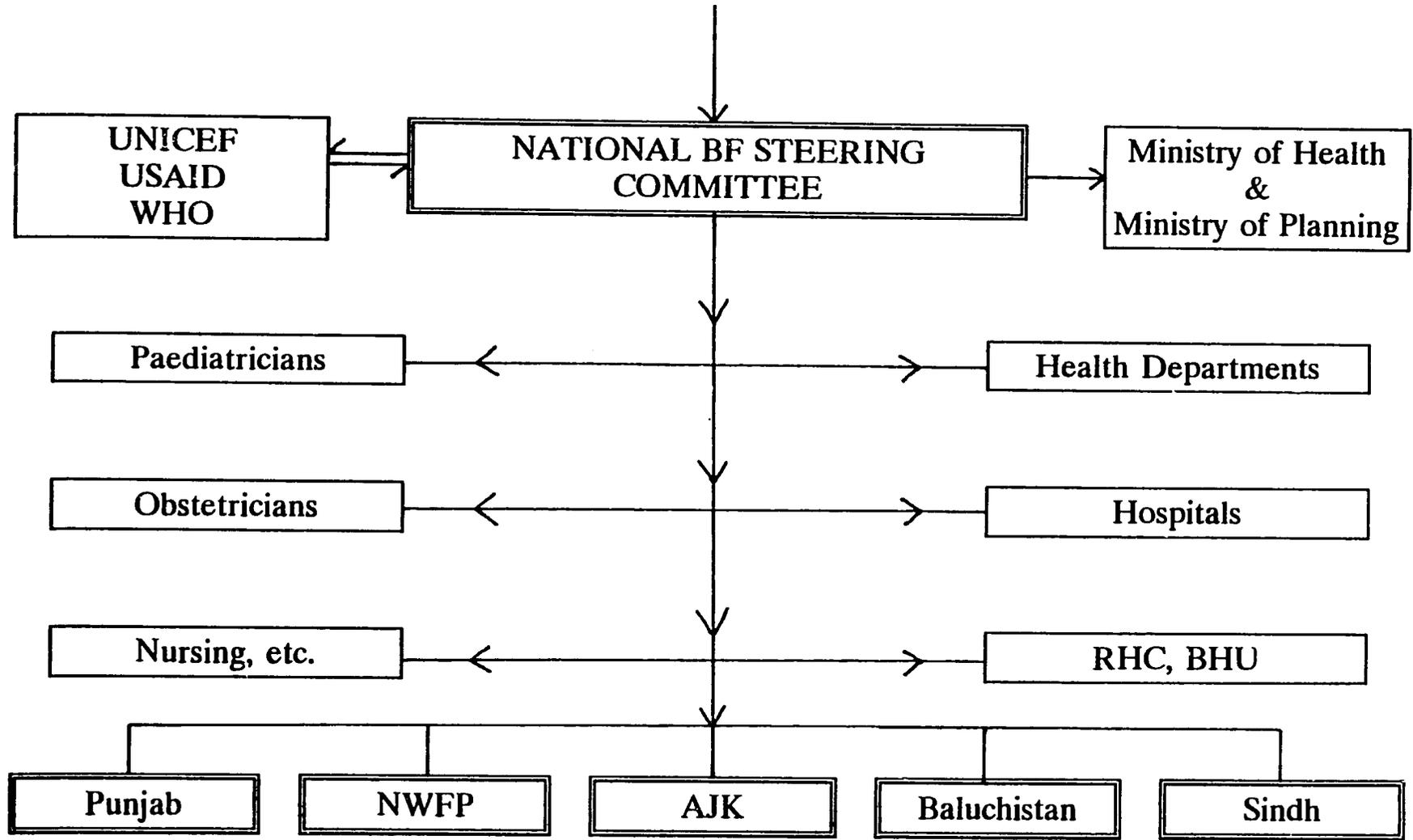
ACTIVITIES

- Baseline Data
- Travelling Seminars
- Workshops
- Posters, Billboards, Banners
- Booths
- Financial help and participation in professional meetings (so that formula manufacturers can be kept out)
- Training Programmes (Wellstart)
- Lactation Management Clinics
- Formulation of Hospital BF Policy
- Sponsorship of visits abroad (IBFAN meeting)
- Liaison with National and International Groups
- Monitoring the Code
- Research — Social Marketing
- Use of mass media for promotion

FUTURE PLANS

- Integration of BF support activities with other national programs (CDD, EPI, ARI, FP)
- Implementation of the "Code"
- Medical and Nursing Education, including TBA's
- Working Women
- Software — Videos, Spots, Manuals

ADVERTISEMENT BAN 1985 PESHAWAR DECLARATION 1988



11

PROGRAM PLAN

Tanzania Food and Nutrition Centre Team

**Mrs. Pauline Kisanga
Dr. Augustine Massawe
Mrs. Lena Mfalila
Monica Ngonyani
Margareth Rweramira**

Dar-es-Salaam, Tanzania

I. BACKGROUND

A. The National Setting

1. Geography

Tanzania Mainland has a total area of 945,000 sq.km. The country is situated in the East Coast of Africa and shares its borders with Kenya and Uganda in the North, Zaire, Rwanda and Burundi in the West: and Zambia, Malawi and Mozambique in the South.

Tanzania is divided into 4 climatic zones - the Coastal zone has high temperatures of about 30,°c, and very high relative humidity. Short rains come in November, while long rains begin in March and continue to May. The Plateau zone comprises of the central plateau and the Masai steppe. Plateaus tend to have high temperatures during the day but drop considerable at night. Rainfall is low and the areas are the least populated in the country. The Lake zone, around Lake Victoria has relatively high rainfall. The fourth zone is the Highlands consisting of the Northern Highlands (Usambara Mountains, Mount Kilimanjaro and Mount Meru) and the Southern Highlands (Ufipa Plateau, Iringa, Mbeya and Uluguru Mountains). These are the most fertile areas of the country and tend to be more densely populated.

2. Demographic Information

Tanzania's population was estimated to be 23 million by 1988. The population rose from 12.3 million in 1967 census to 17.5 million in 1978. At an annual growth rate of 3.2%, about 800,000 persons are added to the country every year. It is projected that the total population will reach 26 million by the year 1991 and 36 million by the year 2000. About 15% of the population lives in urban areas while the remaining 85% is rural. Given the high population growth rate, Tanzania has a young broad based population structure. In the 1978 census, 46.2% of the population was below 15 years of age; 49.1% was between 15-64 years old, while 4.1% of the population aged 65 and above. For every 100 persons aged 15-64 years there were 93 persons under 15 years and 9 persons over 65 years. This the total dependency ration was about 102.

The infant mortality rate was estimated to be 107/1000 (1986) while the average life expectancy was estimated to be 51 years. This reflects an improvement of health services. On the other hand, the fertility rates have remained high. In 1978, the birth rate was around 47 per 1000 while the total fertility rate was 7. This means a woman bears an average number of 7 children during her reproductive life. However, it should be noted that there are appreciable differences in fertility levels between geographical regions as well as between various socioeconomic groups.

3. Administrative Set-Up

Tanzania is divided into 25 administrative regions, of which 20 are in the Mainland and 5 regions are in Zanzibar. The Mainland is further divided into 106 districts. Each district is subdivided into divisions, wards, and villages. There are about 8,500 Villages in the country.

The government machinery was decentralised in 1972 in order to promote peoples participation in the planning process, that is the "bottom-up" planning, as well as to

facilitate local decision-making. Coordination of rural development is done by the Prime Minister's Office. However, in 1982 the Government re-introduced Local Governments so as to strengthen local decision-making. Most of the District Councils are experiencing a number of operational problems due to financial constraints. The district is the most important administrative and implementation level because planning, budgeting and resource command takes place at this level. In recognition of this fact, the Ministry of Health is making serious attempts to strengthen the planning and managerial capacity of the district health teams.

4. Economic Situation

Tanzania is among the poorest countries in the world. Its economy is based on agriculture which accounts for 75-80% of the total export earnings. The country has been undergoing severe economic crisis since 1979. As a result, the Government had to adjust its economic policies. In 1986 the Government signed an agreement with IMF. This brought the much needed foreign exchange in order to boost the economy. High priority is being accorded to the productive sectors, i.e., agriculture and industries. The agricultural sector receives about 30% of the budget. On the other hand, social sectors suffer as they receive less share of the cake. The health sector is allocated only about 4% of the recurrent budget. This threatens the existence and the quality of the good health infrastructure which has been established.

5. Health Services

Health services in Tanzania are provided by the Government, Parastatal organisations, voluntary Agencies and private institutions. The Voluntary Agencies provide about 30-40% of health services and most of their health institutions are located in urban areas. Although private institutions are mostly curative oriented, they provide a potential opportunity for providing preventive and promotive services. Traditional healers and traditional birth attendants also provide considerable health care in our communities.

6. The National Health Policy

The Health Policy evolved in early 1970's in the wake of Arusha Declaration (1967). The Declaration is a blue print of the country's political ideology of Socialism, and Self Reliance. The main objective of the health policy is to provide comprehensive health services to all citizens equitable in the spirit of self reliance and self determination. It gives emphasis on rural health development on preventive and promotive services and on building small health units rather than hospitals, Health care is free. This way it has been possible to reach the grassroot level.

The following strategies were adopted in order to implement the health policy:

- To formulate and implement promotive and preventive health programmes;
- To build health centres and dispensaries - a health centre to serve 50,000 people and a dispensary to serve 10,000 people.

- To train adequate mid-level health workers i.e. Medical Assistants, Rural Medical Aids, MCH Aides, Health Assistants and several categories of nurses.

"Generally, the policy has been well implemented and as a result, between 1972 and 1980 the number of health centres rose from about 100 to 239 while the number of dispensaries rose from 1,500 to about 2,600 (Evaluation of the Health Sector, 1979). In the meantime, hospital expansion slowed. Large numbers of mid-level health workers were trained and in most categories, the targets were surpassed. In addition, several preventive programmes like MCH/FP, EPI, TB/Leprosy and others were launched. The extensive rural health infrastructure has tremendously increased the accessibility of health services. By 1980 nearly 72% of the population was living within 5 km. from a health unit i.e. within walking distance.

Tanzania adopted the PHC Approach following the Alma Ata Declaration of 1978. Since PHC is commensurate with the National Health Policy, its adoption has provided additional impetus to the on-going efforts to achieving the social goal of HFA by the year 2000.

Towards this end, the Ministry has evolved a long term plan (1980-2000) which has the following objectives:

- To raise average life expectancy at birth to 55/60 by the year 2000 by reducing infant mortality rate to 50/1000;
- To provide primary health care to every village by the year 2,000. Every village will govern its own health services independently with support in commodities by the Government;
- To be self-sufficient in health manpower;
- To strengthen the management and supervision of the health services at different levels through training and retraining including the development of a viable health information system;
- To strengthen and improve the health services in all sectors;
- To involve the people in implementation and management;
- To cooperate with the relevant parastatals and ministries;
- To improve the drug supply system, to strive for self-reliance;
- To have an inventory and evaluation every 3 years.

In an attempt to make health care more accessible to communities, the Ministry has embarked on training programmes for Village Health Workers (VHWs) and Traditional Birth Attendants (TBAs). The objective is to have two VHWs in each of the 8,500 villages by giving priority to those villages without a health facility. One of VHWs' main responsibility is promotion and provision of MCH services in the village. On the other hand, TBAs already exist in villages. It is estimated that there are on average, between 2 to 4 TBAs per village. TBAs offer a great potential in increasing the number of supervised deliveries and successful health and nutrition practices.

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Another notable area of development has been the creation of PHC Committees at all levels in order to promote community involvement and intersectoral health action.

Currently, the Ministry is engaged in strengthening District Health Management systems because the district is the implementation level. This is done through training district health teams in planning and management of PHC as well as through providing logistic support.

The provision of health services has been facing mounting operational problems due to a reduction in resource allocation. In addition, the quality of services is deteriorating because of shortage of essential supplies and equipment as well as the poor physical state of health units, especially dispensaries. The situation is compounded by a shift of donor support from social sectors to productive sectors in line with the Government policy to implement the Economic Recovery Programmes. This deteriorating state of affairs poses a threat to the gains achieved during the past decade.

7. Levels of Health Care

National Level - There are 4 consultant hospitals namely: Muhimbili Medical Centre, Bugando Medical Centre, Kilimanjaro Christian Medical Centre, and Mbeya Hospital. In addition, there is a special hospital i.e. Mirembe Mental Hospital. These form the apex of referral system in the country, and they also serve as training grounds for Interns, Nurses and allied Health Personnel.

Regional Level - There are 20 regional hospitals which provide referral services to districts. Each has specialists in various disciplines.

District Level - There are 106 district hospitals each providing referral services to lower health units. The district hospital serves an average population of 250,000. The District Medical Officer is the Manager of District Health Services.

Divisional Level - There are 300 health centres each serving between 50-80,000 people. Each is manned by MA, RAMs, Health Assistants, and trained nurses, Public Health Nurses, Nurse Midwives and MCH Aides.

Health Centres provide both preventive and Curative services and serve as training centres for VHWs and TBAs.

Ward Level - There are about 700 dispensaries each serving between 6-8,000 people or 3 to 5 villages, staff include RMAs and MCH Aides and in some a Health Assistant. Dispensaries provide more than 60% of MCH/FP services. They are potentially capable of training, supervising and supporting VHWs and TBAs.

Community Level - About 1,000 villages have VHWs who are mainly engaged in promotive activities in areas of disease control, sanitation and nutrition and in provision of treatment to common illnesses. They are assisted by Village Health Committees in mobilizing the community for health action. TBAs have been trained

in some regions/districts. A National TBA Training Programme was launched in 1989.

The National administrative and political structures is very important in implementing national programmes because they reach down to the ten cell household.

B. Introduction

Breastfeeding is now a Global Commitment. It is recognized as a human right because breastmilk is the best food for a baby and young child. The International Convention on the Rights of the Child, adopted by the United Nations General Assembly, November 1989 aims "to ensure that all segments of society...are informed, have access to education and are supported in the use of breastfeeding".

The ideal duration of breastfeeding is 2 years. For mother and infant to derive maximum benefits from breastfeeding, the ideal feeding pattern should be: exclusive breastfeeding from the moment of birth through four to six months. The first milk, colostrum, is the child's first immunization. All other substitutes during this period, including cow's milk, milk-powder solution, milk formula, cereal, gruels, water, tea and juices are unnecessary and often harmful. From around the fifth month at the earliest, other foods should be added to complement the baby's breastmilk diet, to meet the infant's increasing energy and nutrient needs. These foods should not replace breastmilk feeds but be given in addition to breastmilk.

Throughout the second year of a child's life breastfeeding is a source of an easily digestible and utilizable, it is an energy-dense food, is a source of defence against illness, (immunological) it delays menstruation and ovulation for mother thereby enhancing child spacing, and it enhances correct emotional and psychological bond between baby and mother.

Mothers who are separated from their infants during the day are able to maintain high breastmilk output by maintaining night feeds.

1. Breastmilk Production

The mother produces breastmilk in response to the baby's suckling. Breastmilk production is basically supply and demand. The earlier the baby starts to suck at the breast the faster the mother responds to the demand and learns to produce breastmilk. The more the baby sucks, (demands) the more milk the mother's body produces (supplies) to meet the demand. Babies should start to breastfeed within one hour after birth since this stimulates the production of breastmilk. Throughout the breastfeeding period, a mother can increase her breastmilk output by suckling the infant more frequently. For example, it is extremely important for the mother of a sick child to remain with the baby and breastfeed as often as possible. This increases breastmilk output and provides the infant with food and liquid, thus preventing severe weight loss and malnutrition.

All mothers can produce enough milk if they start breastfeeding immediately after birth, if they breastfeed on demand, are not separated from their infants at any time from the moment of birth, eat and drink to satisfy their hunger and thirst, give no other foods, drinks or pacifiers to the child for at least 4-6 months.

Monitoring the growth of the child from birth, and regularly in the first months is the most effective way of reassuring the mother that she is producing the amount of milk the infant needs to grow and develop. Mothers also need help when they first start to breastfeed, especially if it is the first born.

The position of the baby on the breast is very important. A bad sucking position can cause sore and cracked nipples, frustration and crying in the baby, failure to obtain enough milk, which also leads to less production. Crying is not a sign that a baby needs artificial feeds. It normally means that the baby needs to be held and cuddled more. Some babies need to suck the breast simply for comfort. If the baby is hungry, more sucking will produce more breastmilk.

2. Water and Breastfeeding

Breastmilk has both water and nutrients to satisfy baby's hunger and thirst. It is common for health workers to prescribe water for bottle-fed babies because formula and cow's milk are "heavy" on the infant's gut. Breastmilk is not. The composition of breastmilk changes even during a feed. It may start as clear liquid or bluish white liquid (full of protein and water) known as foremilk and end as a thick white liquid (full of fat to provide the energy) known as hindmilk. It is important for the baby to feed for long periods (10-20 minutes) to get both the foremilk and hindmilk.

The water or the container in which it is given may introduce some bacteria into the baby's gut, thus causing discomfort and/or even cause diarrhoea.

3. Working Mothers

All mothers work, but because exclusive breastfeeding up to four and six months and continued complemented breastfeeding through two years is so critical for the health of mothers and children, efforts must be focused on making it possible for all mothers to practice this infant-feeding ideal. Infants deprived of exclusive breastfeeding in the first four to six months are infants at increased risk of illness and malnutrition and must be treated as such by the system. All mothers separated from their infants for long periods must be taught skills to maintain high breastmilk production, such as breastfeeding at night and expressing milk during the separation.

Mothers employed outside the home need adequate maternity benefits including adequate maternity leave, breastfeeding breaks during the working day, and facilities at the workplace where their babies can be looked after.

Since there is high prevalence of maternal malnutrition, extra food and drink should be provided to maintain and improve the mother's health and nutritional status while she lactates. Studies have shown that breastmilk does not spoil (as does cow's milk) even at room temperature for over eight hours. So employers and trade unions need to advocate for creches in support of breastfeeding.

4. Breastfeeding and Malnourished Mothers

Using figures for Recommended Intake from Cameroon and Hofvander (1983) and assuming adequately nourished mothers, Bradley et al. (1987) calculated that 500mls of breastmilk will supply a one to two year old child with the following percentages

of his/her needs: Energy - 31%, Protein - 38%, Vitamin A - 100%, Vitamin C - 95%, Calcium - 44%.

It is often claimed that poorly nourished women cannot breastfeed. Studies have shown, however, that such mothers can produce up to 700ml/day during the first six months and 300-500ml in the second year.

The quality of milk of malnourished mothers is in general not different from that of well nourished mothers in terms of protein and lactose content. However, fat content may be reduced and vitamin content does vary by maternal dietary intakes (Hartmann et al. 1985; Brown et al. 1986), in Kyenkyia M. (1990).

Growth of exclusively breastfed children through the first four to six months of life has been shown in most studies in developed and developing countries to be adequate. Even in these countries where maternal malnutrition is high, growth parallels the NCHS standards to the fourth month of life.

5. Breastmilk and Illness

Breastmilk contains protective factors unavailable from any other source. These are adapted to the child's needs and to the stage of lactation. Studies in industrialized countries show higher rates of illness in babies off the breast, even when those babies are fed on clean, well-prepared formulas. Mother's milk also provides the baby with all classes of immunoglobulins, especially IgA. A sick child never loses appetite to mother's milk.

A study by Hoyle et al. In Kyenkyias unpublished script (1990) in Bangladesh compared the normal dietary intake of children aged 6-35 months with that of a matched group who were hospitalized with diarrhoea. Overall, the energy intake of the ill children decreased by 40%. Among those who were substantially breastfed (average frequency, 11 times/day), the energy intake from breastmilk showed little decrease. Breastmilk provided 62-81% of the ill children's caloric intake, the higher figure relating to those mothers who had been educated by staff as to the increased nutritional needs of children with diarrhoea. Although a specially prepared weaning food of local ingredients was served (rice, "dhal", pumpkin, sugar and oil), the continued breastfeeding contributed 2.5 times as much protein to the ill children.

Especially in communities where breastmilk is the young child's principal reliable source of energy and high-quality protein, continued breastfeeding throughout the second year contributes to prevention and treatment of illness and enables a child to grow adequately on a diet of breastmilk plus normal family diet.

6. Does Prolonged Breastfeeding Cause Malnutrition?

With all the nutritional benefits of sustained breastfeeding, some studies still find an association between long breastfeeding duration and malnutrition. Is the problem, really, "too long" breastfeeding as cause of malnutrition?

Studies carried out in Tanzania by TFNC and elsewhere have shown higher rates of malnutrition for those on the breast beyond 18 months than those off the breast. These studies have not, however, collected data on the frequency of breastfeeds, on the overall breastfeeding pattern or on the volume of breastmilk taken. They have not looked at the adequacy of other foods given to the child, nor have they corrected for socioeconomic and other factors. It may be that women tend to go

on breastfeeding when, for economic or other reasons, they have little else to offer their child, so that supplementation is delayed or minimal.

Sustained breastfeeding may improve the child's psychosocial development. For the mother whose work does not take her away from the child for long hours each day (e.g. the typical African woman), breastfeeding keeps her in closer touch with the child.

C. The Situational Analysis of Infant and Young Child Nutrition

Before 1987, the infant and young child nutrition emphasized the weaning age and all efforts focussed on improving the weaning foods and practices for children under five especially those between the age of six months and three years. The problem of dietary bulk or low energy density of weaning foods was being tackled in isolation from breastfeeding. Similarly, the solutions to low feeding frequency and diarrhoeal problems during this age were being sought without much consideration for the important role of breastfeeding.

The prevalence of breastfeeding as indicated by different TFNC surveys is high but nothing is really known about exclusive breastfeeding.

As more mothers (60%) delivered in hospitals the introduction of milk formulas and feeding bottles increased between 1960 and 1978 but dropped thereafter due to the poor economic situation of the country until 1986 when the country changed its trade policy and allowed importation by private firms and individuals.

In 1987, a national workshop on "Breastfeeding and its contraceptive value" reviewed the situation on Infant and Young Child Nutrition and recommended a national programme for promotion of child nutrition with emphasis to breastfeeding be initiated.

1. The Extent of the Breastfeeding Problem in Tanzania

Up until 1987 there was no conclusive data on the situation of breastfeeding in the country. The studies available were few, not comprehensive, they were not standardized so that they look at similar aspects over years and they were in many cases area specific so that they could be used to describe the total situation. The studies available could only be used as pointers to what might be going on.

2. Trend Indications

The most substantial study is that by Dr. Maletnlema T.N. (1978) in Karagwe, Tabora, Kisarawe, Kilimanjaro and Morogoro and breastfeeding prevalence. If the figures are compared with studies that took place later in different areas as summarised by Mrisho F. (1987) slight declines are noticed.

Table 1: The Incidence of Breastfeeding in Each Region by Age in Karagwe, Tabora, Kisarawe, Kilimanjaro and Morogoro (1978)

Age Group in Months	Specifics	Karagwe	Tabora	Kisarawe	Kilimanjaro	Morogoro
0 - 6	No. Examined % Breastfed	40 97.5%	44 93%	45 100%	17 100%	102 93%
7 - 12	No. Examined % Breastfed	44 93%	59 96%	72 99%	104 91%	121 90%
13 - 25	No. Examined % Breastfed	78 37%	70 57%	58 78%	171 68%	222 63%
26 - 48	No. Examined % Breastfed	-- --	-- --	-- --	331 11%	231 11%

Source: Tanzania Notes and Records No. 73 (1978) pp. 45.

A summary by Mrisho F. (1987) indicates the following trends:

- 1986 Morogoro rural: 90% were breastfeeding at six months: 85% at 12 months.
- 1982 Mbinga: Songea, 37% breastfed for less than six months: 30% by 12 months: and 6% above 24 months.
- 1981 Mbeya: 92.8% still breastfeeding at one year: 50% at 18 months: and 45% at 24 months.
- 1980 Dar es salaam: 89% breastfeeding at 12 months in low income group: and 30% in high income group.
- 1978 Musoma: 95% breastfeeding at 12 months.

The Dar es salaam Breastfeeding study by Yambi and Bantje (1980) which covered 2000 high income and 3200 low income under two years old children revealed the following aspects:

- i) Nutrition status improved with increase in income regardless of method of feeding.
- ii) High income mothers delivered in private hospitals where the chances for exposure to infant formulas were higher than for low income mothers who delivered in government hospitals.
- iii) Breastfeeding duration decreased with income regardless of mother's employment status. The proportion of mothers breastfeeding at 12 months after delivery was 89% and 30% in low and high income respectively.
- iv) Among the low income mothers, the low income and employed stopped breastfeeding earlier than their unemployed counterparts.
- v) The high income weaned earlier and used infant formulas more.

- vi) ¾ of high income group used bottles for feeding.
- vii) In the low income bottlefed children had poorer nutritional status than their breastfed counterparts.

3. Methods of Stopping the Child from the Breast

There are very few studies that discuss cessation of breastfeeding Meletnlema T.N. (1987) mentioned abrupt discontinuation of the breastmilk due to pregnancy. A child is normally taken to a relative or unpleasant taste (e.g. chilies) are applied on the nipples.

Otherwise, most Tanzania babies are taken away from the breast when they are old enough to depend totally on family meals.

4. Breastfeeding and Illness

Studies are also very few in this area. A study carried out in Arusha, by Kisanga et al. (1985) and in Zanzibar by Mrisho F. (1987) show that the majority of mothers breastfeed their children during illness. However, a study carried out in Musoma by Ngonyani in Mrisho F. (1987) reported 15% of the 849 women in the study to have withheld breastmilk from children during illness.

5. Breastfeeding and Maternal Education

Maternal education has been found to negatively affect breastfeeding practice. In a study by Jana in Mrisho (1987) 68% of less educated mothers preferred to breastfeed for longer than 18 months compared to 32% for mothers with education above primary school.

6. Maternal Age and Breastfeeding

A study by Krockner in Mrisho F. (1987) in Moshi and Lushoto showed that breastfeeding duration increased with maternal age. In another study reported by Mrisho F. (1987) young mothers (15-29 years) tended to breastfeed for longer duration than older mothers (44-50 years). These two studies are seriously contradicting each other showing the great need for more studies in this area.

7. Some Common Beliefs on Breastfeeding in Tanzania

In certain communities there are beliefs that are detrimental to the promotion of breastfeeding. For example some mothers believe that it is bad to breastfeed when the mother suddenly becomes pregnant: it is not good to breastfeed someone else's child: that the first milk (colostrum) should be thrown away: that if the mother skips breastfeeding for one day the milk goes bad and the mother should discontinue breastfeeding altogether. In a place like Singida for example it is now known that the majority of mothers use one breast to feed the baby.

8. Income and Breastfeeding

Two studies, one of Yambi O and another of Krockner in Mrisho F. (1987) both reported that women with husbands who are wage earners breastfeed for shorter time.

9. The Reasons Given for Stopping Breastfeeding:

In African mothers reasons normally given for stopping to breastfeed include:

- Child is old enough
- Another pregnancy

While Asian mothers it is mostly:

- Milk is not enough
- Child refused the breast milk (This could be attributed to the delay in starting the baby on the breast at birth.)

10. Hospital Routines and Practices

Since the 1987 workshop more information has been made available about hospital practices. In 1989 a child feeding knowledge, attitude and practices (KAP) study was carried out in Dar es salaam by Kisanga (1989) to assess the attitudes of health workers and adequacy of hospital facilities for promoting sound child feeding practices. The study involved 135 health personnel (mostly general nurses, nurse midwives, MCHA and assistant nurses). Face to face interviews revealed that in general health workers attitudes towards breastfeeding are excellent as 100% initiated breastfeeding immediately after birth, and thought it was the best food for baby. They however also had some unsuitable practices. For example 97% gave prelacteal feeds like glucose and water to infants even before the baby was three days old. Hundred percent supplemented the baby by four months on another milk and 62% had given this milk by bottle. Ninety-seven percent of them thought it was a good thing to give baby water even before three months. They were also asked about what advice they gave to mothers. Ninety-nine percent thought prelacteal feeds were good, only 22% advised mothers to continue breastfeeding in case of mastitis. On the knowledge status they were fairly good. At least 70% knew milk production mechanism and how it could be maintained.

These preliminary findings show that health personnel are open to change. What is required is enough of correct information on infant feeding and policies that protect and support breastfeeding and adequate feeding. Employment outside the home seems to be one big problem that health workers are failing to cope with. Maternity benefits such as extended maternity leave, flexible working hours and adequate feeding breaks would improve health worker practices. Similarly, change in hospital routines or policies on prelacteal feeds would tremendously improve infant feeding.

While there is rooming-in, in public facilities, infants are still separated after delivery from their mothers in some private and voluntary hospitals.

11. The Extent of the Problem of the Weaning Age in Tanzania

Most child specialists agree that the soundest development proceeds at the child's own pace. Because every child as it grows will sooner or later lose interest in breastfeeding, practice of gradual weaning may be psychologically beneficial. Traumatic or forced cessation has been associated with anorexia, illness, and regression. It may be even more damaging if the child is sent away from his or her parents, or is stopped from breastfeeding by a hospital stay.

Some mothers and health workers fear that so long as children are still breastfeeding, they will not eat sufficient amounts of other foods. This can be the case where the mother's only close contact with her child is during breastfeeds. Giving ample attention to the child in non-feeding contexts will, however, build an emotional rapport that permits the child to gradually relinquish the breast without fearing a loss of contact with the mother.

In weaning the baby, the objective is not to substitute the breastmilk for other food but to give some food in addition to breastmilk.

12. Major Areas of Concern Are:

1. The age of weaning
2. The first weaning foods and the problem of dietary bulk
3. Equipment used for feeding
4. Feeding frequencies at food and breastfeeding
5. Intra-family food distribution and amount of food per meal
6. Nutrient bioavailability
7. Frequency occurrence of diarrhoea
8. Feeding in relation to activity type and pattern of mother
9. The role of food aid in weaning
10. Feeding during illness

13. The Age of Weaning

Child Feeding Practices studies carried out in the country between 1979-1986 indicate that in general children are weaned at the age of between 3-5 months in both rural and urban areas. Working mothers and high income groups start much earlier than three months. The cattle herding ethnic groups also wean earlier to cow's milk. The tables 1, 2, and 3 show these trends. However, the length of exclusive breastfeeding has not yet been researched.

TABLE 1: Age of Introducing Supplementary Food (%) in Dar es salaam by Percentages

Age (Months)	Low Income		High Income	
	Employed	Unemployed	Employed	Unemployed
1	18.5	15.3	40.0	38.0
2	38.9	22.2	51.0	50.0
3	77.8	48.6	80.0	66.7
4	85.2	83.3	98.0	--
5	94.4	97.5	99.0	90.0
6	100.0	97.2	100.0	97.2
N	54	72	50	36

Source: Infant Feeding Study in Dar es salaam by Mgaza and Bantje (1980).

Table 2: Age of Introducing Supplementary Foods by Income Groups (%)

Age (Months)	Arusha			Moshi		
	Low Income	Medium Income	High Income	Low Income	Medium Income	High Income
1-2	24.0	32.4	16.7	16.3	35.5	33.3
3	34.0	32.4	58.3	33.3	35.5	27.8
4	22.0	35.1	16.7	33.3	16.1	33.3
5-6	20.0	0	0	27.1	12.9	5.6
6+	0	0	8.3	0	0	0
Total	50	37	12	48	31	18

Source: Materu M. Child Feeding Study in Arusha and Moshi (1980).

Table 3: Age of Introducing Weaning Foods in Arusha Rural 1985 (%)

Age (Months)	Wairaqw	Wagorowa	Wambugwe	Masai	Barbaig
< 3	14.2	16.5	15.0	50.0	50.0
3-5	66.9	56.7	65.0	38.0	35.0
6+	18.8	26.8	20.0	12.0	15.0
N	122	96	46	99	34

Source: TFNC Report No. 1073 (1985).

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From the tables you will observe that by the age of four months approximately 80% will have begun giving supplementary foods. Note that by three months at least 50% of the Masai and Wabazibai mothers have already supplemented their children with cow's milk. This group also completely stopped breastfeeding earlier than other groups.

14. The First Weaning Foods

The most popular first weaning food is maize porridge especially in the rural areas, where at least 80% of mothers introduce it plain or with milk and/or sugar in a few households. In urban areas (as indicated on table 4) other foods are also introduced as weaning foods. For example, formula milk was more popular up to 1980, however, this got replaced by cow's milk when the shortages of formula hit the country between 1982-1985. In the high income groups glucose is also popular, while fruit juice is more popular in the lower income urban groups.

The major problem of the weaning food diet in Tanzania, as in many other developing countries, is the dietary bulk aspect. A small baby cannot consume enough food to supply recommended allowance for a day, especially for energy, for a thin gruel taken twice or three times a day. Continued breastfeeding would greatly enhance the energy and other nutrient intake for the young child.

Table 4: First Weaning Food: The Percentage Giving Each Food for Each Income Group

	Low Income	High Income
Uji	48.3	23.2
Formula Milk	30.6	34.3
Glucose	0.7	26.0
Fruit Juice	14.3	11.1
Packet Milk	0.7	0.3
Cerelac	3.4	2.0
Family Food	2.0	0.0
N	139	96

Source: Infant Feeding Study in Dar es salaam by Mgaza O. and Bantje (1980).

15. Equipment Used for Feeding

Even though Tanzanian mothers have correct attitudes towards breastfeeding, the presence of a feeding bottle in a home where there is a small baby is a very common thing. Working mothers often feel they should give the bottle to the baby at the latest in the second month so that the bottle eventually replaced the breast when the mother goes to work after 84 days. Many mothers do not prefer feeding with a spoon or cup because they feel this is inconvenient, wastes time and baby does not get satisfaction. Sometimes the bottles are used for feeding water or fruit juices.

One area where a lot of health education is required is on the hazards of bottlefeeding.

16. Feeding Frequencies and How They May Affect Breastfeeding

The average feeding frequencies for children under five years is 2-3 times a day. With this kind of frequency, young children could continue demand breastfeeding without jeopardising the normal eating patterns. Children are given few meals in a day (2-3 meals a day). Even with low dietary bulk diets, children still need to be fed more frequently (at least up to five times a day) to be able to meet their nutrient requirement. This problem is compounded by:

- Mothers not having enough time to feed their children due to heavy workload
- Insufficient household food security
- Inadequate knowledge on child feeding and nutrition in general

17. Intra-Family Food Distribution

Poor intra-family food distribution leads to children getting insufficient food per meal. The common feeding habit in most households is that children have to share the same plate with grownups. Children need to have enough of the right kind of foods.

18. Nutrient Bioavailability

Most foods given to children are cereal based and have high levels of antinutritional factors like tannins and phytates which in turn inhibit the absorption and utilization of important nutrients like iron.

19. Frequent Occurrence of Diarrhoea and Other Diseases

Frequent diseases lead to loss of appetite and energy depletion and malnutrition. Diarrhoea is very common during the weaning age due to unhygienic conditions and unsuitable preparation of weaning foods.

20. Feeding Sick Children

Not much information is available about feeding sick children. However, a few studies carried out so far, Luber E. (1985), Kisanga P. (1986) indicate that mothers would like to continue feeding sick children except that they fail to effectively do so, as children lose appetite once they are sick. In a few ethnic groups, e.g. Wairaqw and Wanyiramba (mostly cattle herders) water is withheld from a child who has measles with diarrhoea. In general, mothers often despair persuading sick children to eat.

21. Food Aid and Breastfeeding

It is very difficult to obtain correct figures for food aid to Tanzania because food aid comes under different umbrellas. A large bulk is handled by the National Milling Corporation, a parastatal that purchases and distributes all the available surplus grain in the country.

Food aid that passes through NMC include: wheat flour, wheat, rice, maize, dry skim milk, fish, and oils.

Other sources of food aid are USAID, Catholic Relief Services (CRS), World Food Programme and UNICEF.

The data available is that which was collected between 1978-1981. Food that used to come through USAID was that which was termed Title I (commodities for short-term measures to help the country meet the market requirements) and Title II, which was grants towards feeding children in MCH clinics and for school feeding. Table 5 shows some use of Title II commodities in Tanzania, 1978-1981 fiscal year.

Catholic Relief Services (CRS) supports some clinics in the country. In these clinics food is distributed to all children regardless of whether the child really needs it or not. This is quite contrary to the government directives.

Types of commodities distributed under this title are shown on table 6. The World Food Programme mostly distributes food to refugee camps. Major commodities under these are maize and maize meal, oil, fish, dry skimmed milk, beans, and butter oil.

Voluntary organizations are often notorious in supplying food aid to MCH clinics and child care centres.

Food aid is still common in the country and may be necessary at times but there is need to monitor the use of food aid, especially in feeding young children.

22. Conclusions and Recommendations

The weaning period is important:

- Too early weaning is associated with early stoppage of the child from the breast.
- Also, it means early exposure of the infant to disease germs through dirty utensils, uncleaned hands or unboiled water.
- The frequency of eating could be enhanced by breastfeeding as much as possible, leading to improvement in energy intake.
- Food aid should be coordinated and planned so that it does not affect breastfeeding and successful weaning.
- If possible, there should be a clear policy on food aid.

Table 5: Planned Use of Title II Commodities in Tanzania 1978-1981 (in tons)

	1978	1979		1980	1981
MCH (CRS)	3780	4200	(100)	4200	4600
MCH (Afya)	1890	2520	(60)	4940	4200
School Feeding	1982	1188		594	0
Other Child Feeding					
e.g. CRS	918	1020	(25)	1224	0
Food F/Work	642	624	(5)	385	0
Institutions	171	114	(1)	114	114
	9183	11364		10717	10742

Source: USAID - Dar es salaam

Table 6: Type of Commodities Distribution in Tanzania from USAID Title II (in tons)

Product	1975/76 (Lb)	1976/77 (000'lbs)	1977/78 (Lb)	1978/79 (kg)	1979/80 (kg)	1980/81 (Lb)
CSB/CSM	12212	6996	5688	6432	6672	7992
Bulger	2500	1493	1992	1668	1308	888
Veg. Oil	1672	1666	1131	1236	1249	1434
Dry Skim Milk	426	2805	--	--	--	--
Corn Oil Meal	600	854	72	348	228	48
Pinto Beans	--	438	--	--	--	--
Total	17398	14253	8883	9684	9457	10362

Progress made towards improvement of child feeding until 1987.

Several actions had been undertaken to overcome the problem of dietary bulk, although not much was done on breastfeeding before 1987. Industrial process techniques such as pre-cooking, extrusion and enzyme treatment of the starchy foods have successfully been used to reduce the dietary bulk of the staple diets for child feeding. However, such products became so expensive that very few could afford them.

A considerable basic research on dietary bulk reduction of staple diets by using traditional food preparation methods, such as germination, have resulted in potential solutions to the problem. However, these need to be promoted.

Studies on fermentation of weaning foods are, today, in progress. These techniques are both affordable and well known in the country, although for brewing purposes. There is evidence that these techniques have nutritional advantage. They can reduce the dietary bulk and increase bioavailability of some nutrients, such as protein and minerals. Fermentation has other added advantages in that the development of harmful bacteria is kept down, which may help to reduce gastroenteritis among children.

Promotion of improved homemade weaning recipes has been going on since 1976. The first version of the weaning manuals was distributed to extension workers in Morogoro region through a promotional seminar held in 1986. The expectations were that the extension workers would then promote the use of these manuals to the intended target group and make effective use of them in advising parents and community.

However, informal reports from Morogoro indicate that these manuals have not been promoted as expected due to lack of a coordinating force and follow up promotional resources and techniques probably may have limited the achievements on this issue. Kilimanjaro, Arusha and Singida manuals are now in the printing process. Before these are distributed, there is a need to carry out an evaluation on distribution and impact of the Morogoro manuals in order to review the whole approach.

Extensive promotion of germinated cereals (power flour) for child feeding has been carried out in the JNSP Iringa and in CSD programme regions for the past five years. However, the adoption by mothers has been limited, despite all the promising advantages of using power flour for child feeding. Reports indicate, also, that mothers and even promoters are not clear of the purpose of power flour. Whereas the purpose is to increase energy and nutrient density of the gruel, for many of them it is a kind of magic potion. They add it when the child is sick, hoping that it will make the child healthy, sometimes adding it even to thin gruels. Limited understanding of the socioeconomic costs, in terms of time and manpower, of the use of power flour for child feeding are often the contributing factors to poor adoption of these techniques.

It appears, therefore, that there is a communication gap between food scientists and technology developers on the one hand and the users on the other hand. Hence, it has not been possible to realise the expected positive impact of the developed technologies.

There has been efforts to create public awareness on the importance of improved child feeding. Some of the approaches include using radio programmes, press and visual aids. Some studies indicate the constraints caused by women's workload to child feeding. Efforts by different ministries, like the Prime Minister's Office and Community Development Women and Children, are in the process to develop simple technologies such as the use of carts and improved stoves, which can help to relieve women's workload. Present community interventions often focus on the importance of involving both males and females in domestic activities including child care. These are many efforts nationally to improve the living conditions of women. It is assumed that this will give the mothers more time to look after children.

Establishment of day care centres and feeding posts are other efforts carried out by social welfare department.

Whereas these efforts appear to have similar objectives they are, however, not well coordinated, making it difficult to monitor and evaluate their impact on child feeding, except in the CSD programme, which covers only few regions and isolated areas. There is, therefore, a need to support activities aiming at improving child feeding at all levels.

D. Rationale for the National Five Year Programme on Infant and Young Child Nutrition

There is need to promote sound child feeding practices. Breastfeeding needs to be promoted and ensured in its own right because it is every mother's and child's right and not just as a means to enhance child's health. Secondly, breastfeeding should be protected, supported and promoted because of its critical importance, particularly of exclusive breastfeeding. Thirdly, because of the rapidly changing socioeconomic circumstances, breastfeeding practices cannot be assumed to remain traditional. Although health workers favour breastfeeding, many don't know what they should do to help mothers breastfeed successfully. Health workers must have enough current knowledge of breastfeeding so that they can change hospital practices that interfere with breastfeeding. For example, keeping away babies from mothers, giving prelacteal feeds, scheduled breastfeeding and giving free samples of formulas to mothers.

Health workers and women may need more information on how breastmilk is produced, on how breastmilk as a food sustains an infant's growth in the first months; and the relationship between the process of breastfeeding and a woman's health, including her fertility; and how breastfeeding prevents common childhood diseases. Consequently, techniques that women could employ to sustain breastfeeding may be virtually unknown. These include expressing and storing breastmilk, preventing or curing common breastfeeding problems.

On the other hand, there may be "traditional practices" that are not documented. These would include rituals, community support system for pregnant, newly delivered and lactating women, and traditional family practices.

Lack of enough support "endorsement by silence" is used here to describe policies and healthcare practices that hinder initiation and continuation of breastfeeding.

Examples of this are:

- Use of "combined" pills as family planning contraceptives when these have been found associated with reduced breastmilk production.
- Non-inclusion of lactation management training for MCH/FP workers, of all levels.
- Absence of an infant feeding or nutrition policy.
- Other than informing the mothers about the importance of breastfeeding during antenatal care, little is done immediately after delivery to ensure that she initiates and establishes lactation. There is prenatal immunization, growth monitoring and family planning services but not enough prenatal information on child feeding. Neonatal problems are missed by the system, especially those associated with failure to successful breastfeeding.

The traditional breastfeeding practices remain unprotected. There is no in-built mechanism to deal with the increasing demands for women to be engaged in work, which separates them from their young infants for long periods. Even "home-based" farm work has the same effect. The 84 day paid maternity leave caters for a very small percentage of women working

in formal, high level employment, as do the Institution Childcare arrangements, that is estimated to cater to only 2% of children in Tanzania. This does not even cater to the breastfeeding target group.

Childcare arrangements that have been instituted as part of CDS activities to date, cater to toddlers and young children, but not infants.

The absence of national laws governing the marketing of baby foods that are or could be used to substitute breastmilk have allowed for what TFNC terms "quiet penetration of promotion of infant formulas and other baby foods" by commercial enterprises.

A lot of work has been done on the technical side to try to find out solutions for the problem. Examples are the ways to reduce dietary bulk and increase energy density, supplemented by weaning manual and development of simple technologies to reduce women's workload.

While there efforts must continue, more emphasis must be given to the economical and sociological aspects, like affordability of the suggested solutions. This necessitates a closer collaboration between food scientists, technologists, communication experts, nutritionists and social scientists.

Through a strengthened information education and communication system, there will be a change of the negative attitudes and practices on child feeding. This requires intensive educational programmes. For long-term impact, it will be important to constantly review curricula of different learning institutions with the goal of incorporating infant and young child nutrition issues.

II. PROGRAM GOAL

A. Overall Goal

To enable women to exclusively breastfeed their infants from birth to 4 - 6 months and continue complemented breastfeeding for two years and beyond.

B. Five Year Goal

At the end of five years, 50% of health workers in charge of health care of mothers and children should be sensitized on protection, support, and promotion of breastfeeding and ideal breastfeeding patterns achieved in all communities with interventions.

III. OBJECTIVES

A. To Collect Information on Young Child Feeding

By the end of 1995 the following data on breastfeeding should be collected:

- Initiation of breastfeeding after birth,
- Removal of prelacteal feeds from health facilities,
- Exclusive breastfeeding by 4 - 6 months of age,
- Duration and prevalence of breastfeeding, and
- KAP of health workers based on the UNICEF/WHO Ten Steps for Promoting Breastfeeding in Public and Private Hospitals.

B. Operational Research

To conduct operational research on:

- The effect of breastfeeding education programme on Lactational Amenorrhoea in Arusha and Kilimanjaro regions by the end of 1995, and
- The nutritional and psychological effects of feeding premature babies using breastmilk at Muhimbili Medical Centre.

C. Curriculum and Human Resource Development

To develop human resources:

- Training of the national consultative committee on IYCN.
- Compile and pretest training modules for training of health and extension personnel and community groups by June 1992.
- Include breastfeeding component into the curriculum of all medical institutions in Tanzania.
- Secure training for three paediatricians, three obstetricians, two nurse-midwives, and two nutritionists at Wellstart, San Diego, USA, at the end of five years.

D. Training

By the end of five years all four consultant hospitals, all regions and private hospitals, 20% of district hospitals, and 20% of primary health care committees should have their obstetricians, paediatricians, midwives, paediatric nurses, and their administrators trained on basic lactation management skills.

E. Breastfeeding Management

To establish successful breastfeeding at the hospital level.

F. Information, Education, and Communication

To improve information, education, and communication on young child feeding for the whole community and improve availability and quality of home made weaning foods and promote proper complementation of infant and young child diets with special emphasis to two regions with high infant mortality rates at the end of five years.

G. Code on Marketing of Breastmilk Substitutes

At the end of five years to have developed and passed as a law the National Code on the Marketing of Breastmilk Substitutes and Feeding Bottles and started campaign for increased maternity leave for working mothers.

IV. STRATEGIES

A. Collection of Information on Young Child Feeding

1. Inclusion of information on:
 - a. time of initiation of breastfeeding, and
 - b. prelacteal feeding practices on MCH Card No. 4.
2. Inclusion of information on exclusive breastfeeding on the present MCH Card No. 1 and collect data on prevalence, duration, and age of complementation and complete weaning of breastfeeding from the same card.

B. Operational Research

Carrying out research activities on:

1. Feeding of low birth weight babies and premature neonates,
2. Breastfeeding and lactational amenorrhoea, and
3. KAP of health professionals.

C. Curriculum and Human Resource Development

1. Strengthening the existing National Consultative Committee on Infant and Young Child Nutrition by training using the Wellstart Lactation Management Programme Module.
2. Using the National Consultative Committee to review training modules through writers workshops and pretest the modules in the training of different cadres.
3. Soliciting funds for training ten personnel at Wellstart, San Diego, USA.
4. The National Consultative Committee on Infant and Young Child Nutrition will recommend a suitable content on breastfeeding for introduction into the curricula for nurses and medical students (both undergraduate and postgraduate) training.

D. Training

The National Consultative Committee will carry out training from the National to the District Level as shown in Table I. From the Health Centre level to the Village level, training will be done by MCH Coordinators in collaboration with the Primary Health Care Committee.

E. Breastfeeding Management

1. Establishment of mother supporting groups at Muhimbili Hospital and other health facilities after each training workshop.
2. Development and recommendation to the Ministry of Health of a hospital policy on breastfeeding management.

F. Information, Education, and Communication

1. Setting up Tanzania Food and Nutrition Centre and Muhimbili Medical Centre as National Information Resource Centres for Infant and Young Child Nutrition by 1994.
2. Dissemination of appropriate health education to the health workers and community through mass media.
3. Integration of information on proper preparation of weaning foods through breastfeeding training.

G. Code on Marketing of Breastmilk Substitutes

The National Food Control Commission in collaboration with an expert will design a National Code on Marketing of Breastmilk Substitutes and spearhead its legislation.

V. ACTIVITIES

A. Collection of Information on Young Child Feeding

Collect data continuously on feeding practices for children 0 - 2 years through the existing MCH system as follows:

1. Data on time of initiation of breastfeeding after birth of infant, introduction of prelacteal feeds to be collected on MCH Card No. 4.
2. Data on length of exclusive breastfeeding (at 4 - 6 months), prevalence of breastfeeding, age of complementation, method of complementation, and total duration of breastfeeding to be collected on MCH Card No. 1.
3. Using a pretested questionnaire collect data on KAP of health workers in public and private health facilities.

B. Operational Research

Carry out operational research on relevant aspects of young child feeding:

1. Carry out a longitudinal study on nutritional and psychological effects of feeding premature infants using mothers milk at Muhimbili Medical Centre.
2. Study the effects of a breastfeeding education programme on feeding behaviour and lactational amenorrhoea.

C. Curriculum and Human Resource Development

With expert support from IBFAN Africa and Wellstart, the National Consultative Committee will carry out the following:

1. Conduct a one-week training on lactation management using modified Wellstart module, for the National Consultative group, in Arusha.

2. Conduct a two-week writers workshop to review the existing training module and modify it to suit the training of the different cadres.
3. Prepare in a one-week writers workshop appropriate content on young child feeding for inclusion into the syllabus for medical students (both undergraduate and postgraduate) and nursing institutions.
4. The executive secretary of the NCCIYCN will solicit funds for training three paediatricians, three obstetricians, two nutritionists, and two midwives at Wellstart, San Diego.

D. Training

The National Consultative Committee on Infant and Young Child Nutrition, with expert support from IBFAN Africa, will carry out training on lactation management for different cadres as shown in Table 1.

1. One two-week training of trainers workshop for twenty zonal and regional MCH Coordinators.
2. One-week lactation management orientation workshops (see Table 1) for paediatricians, obstetricians, midwives, paediatric nurses, and hospital administrators in:
 - a. four consultant hospitals,
 - b. five regional hospitals, and
 - c. three private hospitals.
3. One-week lactation management orientation workshops for five District Primary Health Care Committees.
4. MCH Coordinators and District PHC Committees to conduct three-day orientation workshops for five health care centre health professionals (paramedicals and nurses in their districts.
5. District PHC Committees and District MCH Coordinators to organize two-day orientation workshops for health professionals, paramedicals, nurses, village health workers, and TBA's in their districts.

E. Breastfeeding Management

1. Establish a mother support group of 10 personnel at Muhimbili Medical Centre and at each of the consultant, regional, and district hospitals where training workshops have been conducted.
2. Develop a content for a clear hospital policy on breastfeeding in Tanzania, and recommend to the Ministry of Health.
3. Remove prelacteal feeds and feeding bottles in all hospitals and health services where the mother support groups have been started.

F. Information, Education, and Communication

Improve information, education, and communication on young child feeding for health care professionals and the general public.

1. Develop an information resource at Tanzania Food and Nutrition Centre and Muhimbili Medical Centre.
2. Produce a quarterly newsletter on young child feeding for health workers.
3. Development and production of charts and pamphlets on young child feeding.
4. Disseminate four radio programmes through the radio for the general public.
5. Censor information material for distribution to different cadres of health workers.
6. Design and integrate information on proper weaning practices into health worker training at all levels.

G. Code of Marketing of Breastmilk Substitutes

1. The National Food Control Commission in collaboration with an expert to design an National Code on Marketing of Breastmilk Substitutes.
2. Legal experts to discuss the draft Code in a one-day workshop and recommend for legislation.

VI. PROGRAMME ORGANIZATION

A. Organization and Staff

The responsibility of protecting and promoting sound infant and young child nutrition lies with the national government, in this case the Ministry of Health. From the experience gained from other successful programmes, implementation of the programme has been vested in the Multisectoral Committee which was recommended in the National Workshop in Morogoro in 1987 and formed in 1988. The programme is known as The "National Programme for Infant and Young Child Nutrition, (NPIYCN) and the Committee as "National Consultative Committee on Infant and Young Child Nutrition" (NCCIYCN).

The Committee is the main policy and steering body for the planning and implementation of the programme.

The composition of the NCCIYCN as endorsed by the national workshop in 1987 is as follows:

Chairman: Ministry of Health

Executive secretary and coordinator: Tanzania Food and Nutrition Centre

Members: Ministries of Education; Health; Trade and Industries; Information; Community Development, Women, and Children; Agricultural and Livestock; Muhimbili Medical Centre; Universities of Dar-es-Salaam and Solocine; Tanzania Women's Organization; Tanzania Trade Union; National Food Control Commission; Tanzanian Bureau; Tanzania Food and Nutrition Centre; and others as may be co-opted.

Ex-officio: UNICEF, WHO, SIDA, UNFPA, USAID

The Committee functions under five subcommittees whose members are also selected from the Ministries and institutions shown above. The subcommittees are working groups which must meet every three months.

The National Consultative Committee is required to convene every three months. Adhoc meetings can be convened whenever necessary.

Period of Tenure of NCCIYCN: Membership is on official and not on individual capacity and so membership goes with the official post. However, based on the state of Contribution of the member, membership can be withdrawn by the Consultative Committee. Expert members like obstetricians, paediatricians, or lawyers are coopted on individual capacity.

B. Task Forces and Responsibilities

<u>TASK FORCE</u>	<u>RESPONSIBILITIES</u>
1. RESEARCH	To initiate applied research in the subject area. To compile research priorities for Tanzania and assist in design and coordination of different research being carried out by other institutions in the subject area. To direct utilization of relevant findings for the national programme and publish relevant findings in international journals.
2. POLICY AND LEGISLATION	
A. REGULATING MARKETING PRACTICES	To review the International Code on the Marketing of Breastmilk Substitutes, and feeding bottles, and adapt it to the Tanzania situation. To prepare legislation of the Code, including sponsorship of three persons from TFNC, Ministry of Trade and Industry, and Department of Law and Justice to attend a one-month course at Penang in 1991. To monitor the implementation of the Code.
B. SUPPORT SYSTEM	To review and recommend for appropriate Legislation and Policy on employment benefits available to breastfeeding mothers.
C. HOSPITAL POLICY	To adopt the UNICEF/WHO "Ten Steps to Successful Breastfeeding" in health facilities and monitor their implementation. Results will be published annually in a score card and give feedback to health facilities.
3. INFORMATION, EDUCATION, COMMUNICATION, AND TRAINING	To review curricula for medical and paramedical staff as well as other relevant fields like Community Development, Agricultural Home Economics, Secondary, Primary School, and Adult Education, for gaps on

information on breastfeeding and develop training modules for different cadres.

To create a resource centre for breastfeeding, Infant and Young Child Nutrition, TFNC and MMC.

To coordinate and supervise refresher courses, seminars, and workshops on breastfeeding for trainers, field workers, health personnel, and the general public.

4. BREASTFEEDING MANAGEMENT

To develop, train, and supervise mother support groups, especially for maternity wards, working places, and different community groups, e.g., Maternal & Child Health Aides and Village Health Workers.

To initiate networking of national groups through information exchange.

5. IMPROVING QUALITY AND AVAILABILITY OF WEANING FOODS

To promote suitable weaning foods at community and national levels.

Members of the National Consultative Committee on Infant and Young Child Nutrition 1990 - 1994

<u>NAME</u>	<u>POSITION</u>	<u>INSTITUTION</u>
1. Mrs. J. Safe	Chairperson	Ministry of Health
2. Mrs. P. Kisanga	Secretary	Tanzania Food and Nutrition Centre
3. Mr. W. Lorri	Member	TFNC
4. M. Mtinda	Member	Community Development
5. Mr. D. Makala	Member	Social Welfare
6. Dr. G. S. Mpangile	Member	UMATI
7. Dr. D. Kihwele	Coordinator Research Task Force	MMC
8. Mr. H. Missano	Member	TFNC
9. Dr. A. Massawe	Member	MMC
10. Dr. F. Mrisho	Member	MMC
11. Dr. W. Mpanju	Member	MMC
12. Dr. Mkerenga	Member	MOH
13. Sr. J. Mdetele	Member	MOH
14. Dr. M. Keregero	Member	MOH
15. Mrs. A. Wamunza	Member	SUA
16. Dr. F.P. Kavishe	Managing Director	TFNC
17. Mr. J. Ndossi	Coordinator Code/Policy Task Force	NFFC
18. Sr. Mushi	Coordinator Lactation Management Task Force	MMC
19. Mrs. R. Kingamkono	Coordinator Weaning Task Force	TFNC
20. Mrs. E. Pendaeli	Coordinator Information, Education, and Communication Task Force	MOE

Members of the Different Task Forces

	<u>NAME</u>	<u>POSITION</u>	<u>INSTITUTION</u>
1.	Research Task Force		
	1. Dr. D. Kihwele	Coordinator	MMC
	2. Mrs. F. Magambo	Member	TFNC
	3. Mrs. Lugeye	Member	SUA
	4. Dr. S. Kimboka	Member	TFNC
	5. Mrs. P. Kisanga	Member	TFNC
2.	Policy and Legislation		
	1. Mr. Ndossi	Coordinator	National Food Quality Control Commission
	2. Mr. Makala	Member	Social Welfare
	3. Mrs. M. Ngonyani	Member	TFNC
	4. Dr. L.J. Kilunga	Member	Ministry of Labour
	5. Mr. D. Ntonge	Member	TFNC
3.	Information, Education, Communication, Training		
	1. Mrs. E. Pendaeli	Coordinator	MOED
	2. Miss V.T. Mushi	Member	MOED
	3. Mr. Mtavangu	Member	MMC
	4. Mrs. H. Missano	Member	TFNC
	5. Miss M. Rweramira	Member	TFNC
	6. Mr. D. Navetta	Member	TFNC
	7. M.J. Mdetele	Member	MOH
4.	Breastfeeding Management		
	1. Sr. Mushi	Coordinator	MMC
	2. Dr. Mwaikambo	Member	MMC
	3. Ms. Masila	Member	MOH
	4. Dr. A. Massawe	Member	MMC
	5. Miss V. Mambosho	Member	TFNC
5.	Weaning Food and Practices		
	1. Mrs. R. Kingamkono	Coordinator	TFNC
	2. Mrs. M. Ahungu	Member	MOH AGRIC
	3. Mrs. S. Biswalo	Member	MOED
	4. Mrs. H. Mtinda	Member	MOECD, WOM, CH
	5. Ms. M. Msangi	Member	TFNC
	6. Mr. W. Lorri	Member	TFNC
	7. Mrs. U.P. Mushi	Member	MOE

VII. WORK PLAN

ACTIVITY	1992	1993	1994	1995	1996
A. Data collection					
1. Initiation of breastfeeding					
2. Prolactal feeds					
3. Exclusive breastfeeding					
4. Prevalence of breastfeeding					
5. Duration of breastfeeding					
6. Weaning practices					
7. KAP of health workers					
B. Operational Research					
1. Breastfeeding lactational amenorrhoea					
2. Breastfeeding for preterm infants					
C. Human Resource Development					
1. Training of National Consultative Committee on Infant and Young Child Nutrition					
2. Training of ten medical personnel					
3. Review of training modules					
4. Inclusion of breastfeeding information into the curricula of nursing and medical training					
D. Training					
1. Consultant hospital					
2. Regional hospital					
3. MCH coordinator/zonal/regional					
4. District PHC team					
5. Health centre care team					
6. Dispensaries					
7. Private services					
E. Breastfeeding Management					
1. Establish mother support groups					
2. Breastfeeding policy to Ministry of Health					
3. Removal of prolactal feeds and feeding bottles					

ACTIVITY	1992	1993	1994	1995	1996
F. Information, Education, and Communication					
1. Information resource development at Tanzania Food and Nutrition Centre and Muhimbili Medical Centre					
2. Quarterly newsletter on infant and young child nutrition and disseminate to all health professionals					
3. Development of charts and pamphlets					
4. Mass media education					
5. Censorship of information material for distribution to different target groups					
6. Integration of information on proper weaning foods in breastfeeding training					
G. National Code Development					
1. Draft the Code by experts					
2. Three-day workshop to review and recommend the draft for legislation					

VIII. EVALUATION

- A. The users of the evaluation will include the Programme implementors and the decision makers.
- B. To measure how goals have been achieved in each activity and give feedback to programme implementors and decision makers. To identify effects and impact of the programme.
- C.
1. By the end of five years 50% of health workers and all the community should be sensitized on breastfeeding.
 2. To change hospital practices which discourage initiation of breastfeeding in nine hospitals (four consultant hospitals and five regional hospitals)
 3. To develop an effective national code on marketing of infant foods.
 4. To develop human resources for health personnel on lactation management.

OBJECTIVE	ACTIVITY	EVALUATION INDICATORS	SOURCE OF INFORMATION	USE OF RESULTS
1. Monitoring and Evaluation To establish breastfeeding trends and KAP of health workers	Collect Data 1. Initiation of breastfeeding 2. Prolactal feeds 3. Exclusive breastfeeding 4. Duration 5. Prevalence 6. Weaning practices 7. KAP studies	To have a national report on trends: 1. Initiation of breastfeeding 2. Prolactal feeds 3. Exclusive breastfeeding 4. Duration 5. Prevalence 6. Weaning practices 7. KAP studies	Modified MCH cards No. 1 and 4.	Direction of Programme and feedback to implementors.
2. Operational Research Carry out scientific research on breastfeeding and infant and young child nutrition	1. Carry out longitudinal study on effects of feeding mother's milk on preterm and term infants and its effect on physical and psychosocial development. 2. Breastfeeding education and monitoring child feeding behaviour changes and duration of lactational amenorrhoea.	1. Scientific findings to be published in a scientific journal. 2. Scientific findings to be published in scientific journals.	1. Muhimbili Medical Centre Neonatal Ward and a well baby care clinic in Dar-es-Salaam. 2. Breastfeeding mothers of infants of 0 - 3 years in selected communities.	1. To give recommendations: breastmilk is the appropriate milk for preterm infants. 2. To promote breastfeeding as one of the methods of contraception as per findings.
3. Human Resource Development Develop human resources for national programme implementation.	1. Training of national committee. 2. Training of ten medical personnel at Wellstart. 3. Review training modules for three different cadres. 4. Inclusion of breastfeeding teaching into medical and nursing curricula.	1. One training for national committee. 2. Three training modules. 3. Ten personnel trained at Wellstart.		

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OBJECTIVE	ACTIVITY	EVALUATION INDICATORS	SOURCE OF INFORMATION	USE OF RESULTS
4. Training To train different cadres.	1. Consultant hospitals. 2. Regional hospitals. 3. MCH coordinator, zonal, and regional. 4. District primary health care team. 5. Health centre care team. 6. Dispensary health team. 7. Private services.	See Table 1.		Feedback to implementors and policy makers.
5. Breastfeeding Management	1. Establish mother support groups. 2. Development of breastfeeding policy. 3. Promote early initiation of breastfeeding and removal of prelacteal feeds.	1. Mother support group established. 2. Working hospital policy established. 3. Breastfeeding established within ½ hour in hospitals. 4. Absence of prelacteal feeds in hospitals.	Health facilities.	Feedback to implementors and policy makers.
6. Information, Education, and Communication (IEC) To improve IEC at different levels	1. Develop information resource at TFNC and MMC. 2. Circulate quarterly newsletter on infant and young child nutrition. 3. Develop charts and pamphlets. 4. Release four radio programmes. 5. Censor education material on breastfeeding for different target groups. 6. Integrate information on proper weaning into training of health personnel.	1. Information resource materials at TFNC and MMC. 2. Four newsletters circulated. 3. Five charts and five pamphlets on infant and young child nutrition. 4. Four radio programmes. 5. Censorship of education materials initiated.	Produced documents.	Feedback to programme implementors and decision makers.
7. National Code on Marketing To draft national Code and spearhead legislation.	1. Drafting the Code by experts. 2. Hold workshop to review draft and its legislation.	1. A draft Code. 2. A legislation in process.	Produced documents.	Feedback to programme implementors and policy makers.

IX. BUDGET IN U.S. \$000

ACTIVITY	1992	1993	1994	1995	1996
1. Data Collection	18.5				
2. Operational Research	25.0	21.5	23.5	48.5	
3. Development of Human Resources	59.7	50.0			
4. Training	36.2	36.2	36.2	36.2	36.2
5. Breastfeeding Management	1.6	0.6			
6. Information, Education, and Communication	32.6	12.6	12.6	12.6	12.6
7. Code of Marketing of Breastmilk Substitutes	9.5	6.0			
8. Monitoring and Evaluation	2.1	4.2	4.2	4.0	5.0
	185.2	131.1	76.5	101.3	53.8

ACTIVITY	1992	1993	1994	1995	1996
DATA COLLECTION					
Purchase of stationery					
Printing of 400,000 MCH 1 & 4 cards	18.0				
DSA, transport, and fuel	0.5				
Total Data Collection	18.5				
OPERATIONAL RESEARCH					
Lactation Amenorrhoea: DSA, stationery, transport, and fuel	20.0	16.5	23.5	48.5	
Breastfeeding for preterm & full term study: DSA for 4 clinicians & 4 staticians, stationery, transport, and fuel	5.0	5.0			
Total Operational Research	25.0	21.5	23.5	48.5	
DEVELOPMENT OF HUMAN RESOURCES					
Fees for 10 personnel PTO	50.0	50.0			
DSA for participants	3.7				
DSA for 5 local resource persons	1.0				
1 IBFAN and 1 Wellstart resource person					
Transport to Arush, fuel and DSA for drivers	2.0				
Stationery and printing	3.0				
Total Development of Human Resources	59.7	50.0			

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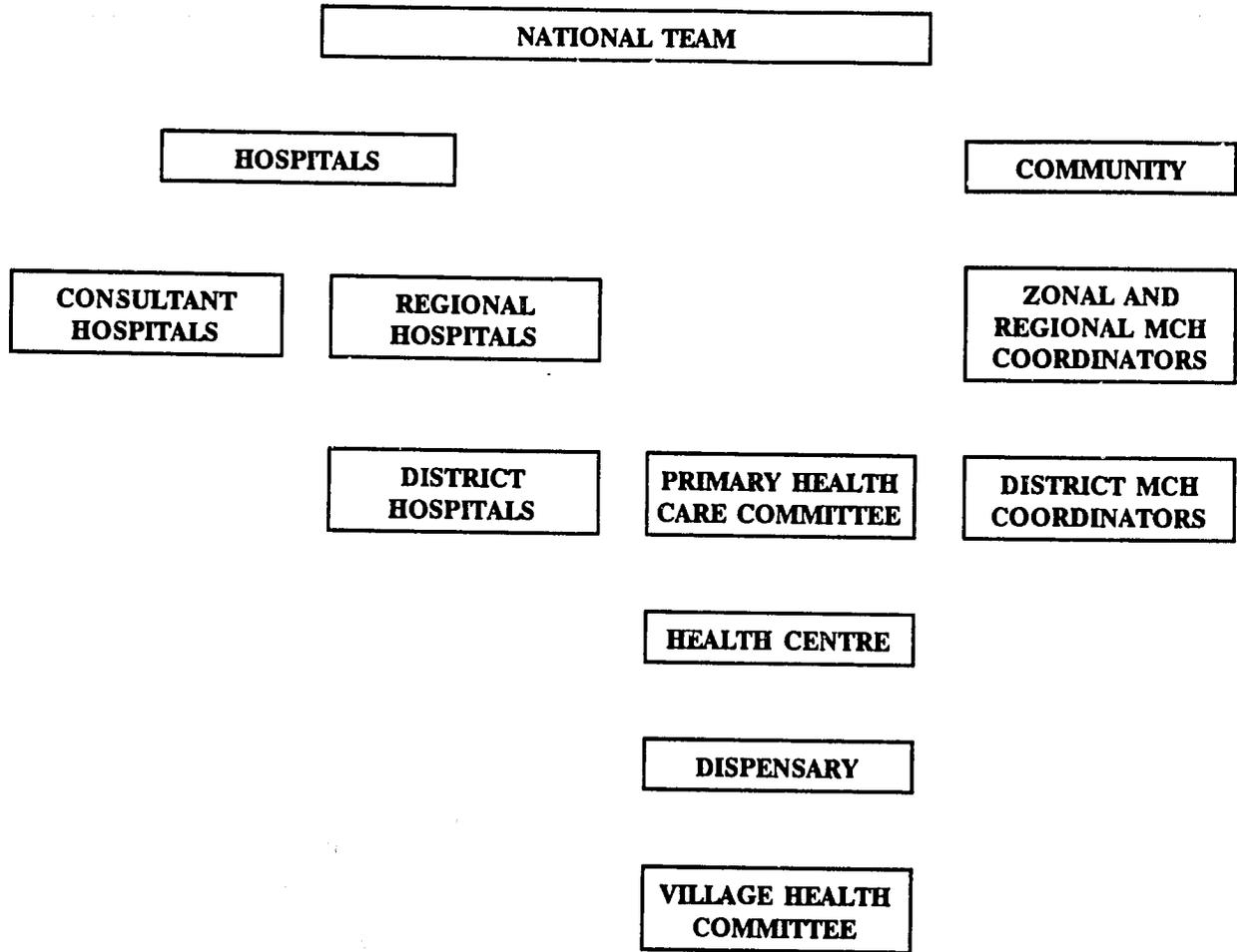
ACTIVITY	1992	1993	1994	1995	1996
TRAINING					
Consultant hospital: DSA to 20 participants each year	2.7	2.7	2.7	2.7	2.7
DSA for 5 resource persons	0.7	0.7	0.7	0.7	0.7
Transport and fuel	0.4	0.4	0.4	0.4	0.4
Regional hospital: DSA for 160 participants	5.3	5.3	5.3	5.3	5.3
DSA for 5 resource persons	0.7	0.7	0.7	0.7	0.7
Transport and fuel	0.4	0.4	0.4	0.4	0.4
Regional & zonal MCH coordinator: DSA for 27 participants	3.0	3.0	3.0	3.0	3.0
DSA for 5 resource persons	0.7	0.7	0.7	0.7	0.7
Transport and fuel	0.4	0.4	0.4	0.4	0.4
District primary health care team: DSA for 300 participants	16.0	16.0	16.0	16.0	16.0
Transport and fuel	0.4	0.4	0.4	0.4	0.4
DSA for 5 resource persons	3.7	3.7	3.7	3.7	3.7
Administration costs	1.4	1.4	1.4	1.4	1.4
Stationery	0.4	0.4	0.4	0.4	0.4
Total Training	36.2	36.2	36.2	36.2	36.2
BREASTFEEDING MANAGEMENT					
Technical support	0.1	0.1			
Consultancy fees	0.5	0.5			
Stationery and printing	1.0				
Total Breastfeeding Management	1.6	0.6			
INFORMATION, EDUCATION, AND COMMUNICATION					
Purchase of office equipments	20.0				
Production of 2,000 quarterly newsletters	3.6	3.6	3.6	3.6	3.6
Production of 500,000 charts and 50,000 pamphlets	8.5	8.5	8.5	8.5	8.5
Radio programme — technical assistance	0.2	0.2	0.2	0.2	0.2
Postage costs	0.3	0.3	0.3	0.3	0.3
Total Information, Education, and Communication	32.6	12.6	12.6	12.6	12.6

ACTIVITY	1992	1993	1994	1995	1996
CODE ON MARKETING OF BREASTMILK SUBSTITUTES					
Consultancy fee for 1 person	0.5				
Technical support for 3 persons	6.0	6.0			
DSA for 20 participants	0.6				
Stationery and printing of reports	2.0				
Transport and fuel	0.4				
Total Code on Marketing of Breastmilk Substitutes	9.5	6.0			
MONITORING AND EVALUATION	2.1	4.2	4.2	4.0	5.0
Total Monitoring and Evaluation	2.1	4.2	4.2	4.0	5.0

TABLE 1

LOCATION	UNIT	TOTAL NO. PERSONS	YEAR					TOTAL TRAINED	NO. OF TRAININGS
			1	2	3	4	5		
1. National	1	20	20					20	1
2. Consultant hospital	4	80	20	20	20	20		80	4
3. Regional hospital	20	160	32	32	32	32	32	160	5
4. MCH coordinator, zonal, and regional	20	27	1						1
5. District primary health care teams	106	1590	60	60	60	60	60	300	5
6. Health centre care teams	300	3000	120	120	120	120	120	600	5
7. Dispensary	2700	27000	1350	1350	1350	1350	1350	6750	125
8. Private services	Data to be collected								

TRAINING



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