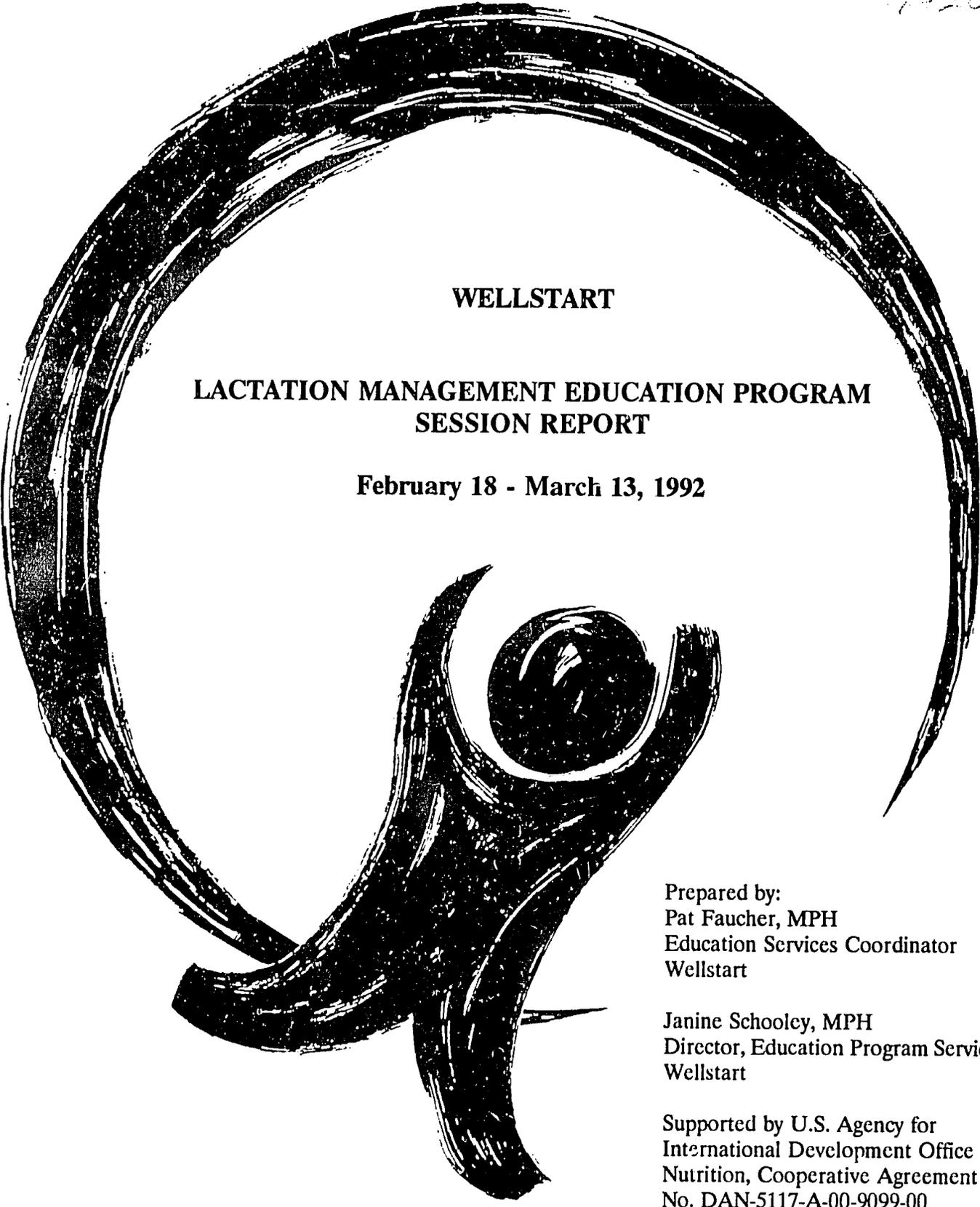


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**WELLSTART**

**LACTATION MANAGEMENT EDUCATION PROGRAM  
SESSION REPORT**

**February 18 - March 13, 1992**

Prepared by:  
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**WELLSTART<sup>SM</sup>**

## **TABLE OF CONTENTS**

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

## **APPENDICES:**

- 1: Participants**
- 2: Course Schedule**
- 3: Faculty and Staff List**
- 4: Pre and Post Test Scores Summary**
- 5: Course Evaluation Summary**
- 6: Team Program Plans**

**Cameroon**  
**Nigeria**

## **I. Introduction and Summary**

A Lactation Management Education (LME) Program course was held at the Wellstart facilities in San Diego from February 18 - March 13, 1992. Nine multidisciplinary health professionals from two countries (Cameroon and Nigeria) attended the four week 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 in-service 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, unannounced pre- and post-tests were given. Results of these tests suggest that participants' knowledge base was increased at the completion of the four-week course. (Average scores rose from 43.33% to 66.67% 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 4.7, using a scale of 0 to 5, with 5 being the highest possible score.

- (3) An evaluation form was given to participants at the end of the entire course to allow them an opportunity to comment on all elements of the course experience. The results of these evaluations are summarized by discipline and for the group in Appendix 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**

There have been seven previous participants in the LME Program from Nigeria, bringing the current total to ten Wellstart Associates now in Nigeria. The course was particularly timely for this participant team since their hospital (University of Calabar) had just been selected for designation as a WHO/UNICEF Baby Friendly Hospital (one of five in Nigeria which is a Baby Friendly Initiative lead country). Though there was a last minute change in the team from Nigeria, the replacement of Mrs. Doris Etiin-Okon for Mrs. Moira Young, who became ill and could not participate, was appropriate.

The six participants from Cameroon were the first from that country and the first bilingual French-speaking participants in the LME Program. It was particularly gratifying to have this first representative group from Francophone Africa. It is an important step in the process of developing French language capability to meet the need for LME in the Francophone world.

There was a reasonable multidisciplinary mix within the participant teams, though unfortunately no nutritionists were represented and there was a preponderance of physicians (four pediatricians and one family practice). The teams were highly appropriate with regards to commitment and quality.

Additional teams from Pakistan and Iran were also expected to participate in this course. However, insurmountable delays in processing (Pakistan) and changes in plans (Iran) forced last minute withdrawal of these teams.

### **Education/Motivation**

The LME course is 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.

There were a number of minor modifications in session content and approach based on feedback from the previous LME course. The more focussed approach to clinical

counselling had been verbally appreciated and was highly rated. In addition to role playing and the didactic portion on counselling techniques and theory, a clinical practicum, providing more interactive experience with real patients, was included during the second set of hospital rounds. A full morning was designated for issues relating to outreach beyond the traditional hospital setting. Sessions on TBA training, working women and Mother's Support groups were linked together by discussions on how participant teams, though predominantly teaching-hospital based, can reach out into the community and have a direct and indirect influence on the primary health care or community level. The expanded view of breast pathology, which was incorporated into the curriculum during the last course, was retained. Wellstart's Perinatal Nutritionist again contributed information on the role of good nutrition in breast tissue development and health to this presentation.

During the third week of the course, two government officials from Mexico visited Wellstart. Ms. Yolanda Senties, Director, Maternal and Child Health Division, Ministry of Health; and Dr. Fernando Herrera Lasso, Director, Special Programs in charge of Mother-Baby Friendly Program, Maternal and Child Health Division, Ministry of Health, were able to view first-hand the LME course in operation and to discuss with Program staff potential areas of interaction and collaboration. Mr. Manuel Manrique, UNICEF Mexico, accompanied this high level Mexican delegation on the visit.

In addition, two of the staff from the new USAID/R&D/Health-funded Wellstart project office in Washington, DC (EPB Project) were able to view the course from the participants' perspective, assuming the role of full participants. Elizabeth Rasmusson, Program Assistant, was in San Diego for almost the entire four weeks, and Martha Holley, also Program Assistant, was able to participate for the last half of the course. Their participation contributed greatly to their orientation as new Wellstart staff and to their understanding of breastfeeding, lactation management and this USAID/R&D/Nutrition-funded project.

Dr. Derrick Jelliffe and E.F. Patrice Jelliffe attended the course on the final day and participated in the team plan presentation session as special guest reviewers. A large amount of interaction took place and the participants were honored with their valuable experience and expert feedback. Discussion of potential areas of further collaboration and support also occurred. The Jelliffes were able to meet with the staff and participants socially at lunch and then at the farewell banquet later that evening. This visit by Dr. Jelliffe was his very last to Wellstart. He passed away four days later. The extent of his contribution to breastfeeding around the world is beyond measure. He will be sorely missed.

### **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 allowed each team (one from Nigeria and two from Cameroon) to "purchase" relevant teaching materials such as slides, text books, video tapes, teaching dolls, and breast pumps for use in-country. Participants were also provided, as part of their course syllabus, with information on how to create good teaching slides and handouts, and suggestions on how to organize reprints, slides and related materials. Participants were urged to review and utilize this valuable information as they work on establishing and maintaining their collections of teaching resources.

## **Program Planning**

An essential component of the LME course experience is the preparation and presentation of each team's plans for program implementation. Copies of these plans are included as Appendix 6.

The teams formally presented their plans to an audience of Program faculty and staff (from both the San Diego and Washington, D.C. offices) and special guests on the final day of the course. As an important next step, they were urged to share their plans with their supervisors, the USAID Mission, the Ministry of Health 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.

Because of a particular interest in Cameroon, the EPB Project requested and supported the routing of the Cameroon team through Washington, DC on their way back to Africa. This allowed a unique opportunity for networking, further presentation of team plans, and discussions on possible collaboration and potential resources of support.

### **III. Recommendations for the Future**

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

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

In the case of Nigeria, these new Wellstart Associates will need to make a special effort to communicate with other Wellstart Associates from their country to coordinate efforts and resources. This will help to strengthen the growing national effort of which they are a part and will help to insure a successful Baby Friendly Hospital Initiative in this lead country.

Though Cameroon is a new entry into the LME Program, and thus this team does not yet have other Wellstart Associates to link up to, the team will need to explore and seek out any existing breastfeeding promotion efforts with which to coordinate. For example, this team's participation in the upcoming Policy Maker's Workshop in Yaounde will be an essential step in insuring coordination and appropriate utilization of this team as a national/regional resource of expertise. In addition, since Cameroon is the first French-speaking country to participate in the LME program, there is the potential that a regional resource for

Francophone Africa could be realized in the future. This potential will need to be further explored and cultivated.

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

As these teams work to implement their program plans, it is hoped that agencies with a vested interest in the success of these worthwhile efforts such as the USAID Missions in-country, governmental and non-governmental organizations such as PRITECH, and international funding agencies such as UNICEF, will lend their commitment and support. This will assure that this important initial investment will develop into long term, institutionalized teaching and clinical service programs which can serve as essential resources for any effort at the local, national and regional levels to promote, protect and support breastfeeding.

**APPENDIX 1**

**Participants**

**WELLSTART**  
**Lactation Management Education Program**  
**February 18 - March 13, 1992**

**COURSE PARTICIPANTS**

**CAMEROON**

---

**Central Hospital/PMI Centrale**  
**Yaounde, Cameroon**

**Dr. Martina Baye**  
**Bureau Chief for Family Protection**  
**Ministry of Health**  
**Deputy Medical Officer**  
**PMI Centrale (MCH Clinic)**

**Dr. Esther Ken Achua Gwan**  
**Pediatrician**  
**University Teaching Hospital**

**Mrs. Justine Nankam**  
**Senior Level Nurse, General Supervisor**  
**Central Hospital**

**Dr. Agnes Bongang**  
**Pediatrician, Assistant in Charge**  
**Neonatal Unit**  
**Central Hospital**

**Dr. Edwin Njodzefon Kimbo**  
**Pediatrician**  
**Chief Medical Officer**  
**PMI Bafoussam (MCH Clinic)**

**Mrs. Monique Simo**  
**Senior Level Nurse, Professor**  
**Advanced Level State Nursing School**

**NIGERIA**

---

**University of Calabar**  
**Calabar, Nigeria**

**Clara M. Ofere**  
**Principal Health Nursing Tutor**

**Mrs. Doris Etim-Okon**  
**Principal Health Nursing Officer**

**Dr. Obot Essien Antia-Obong**  
**Lecturer/Consultant Paediatrician**

**APPENDIX 2**  
**Course Schedule**

**WELLSTART**  
**Lactation Management Education Program**  
**February 18 - March 13, 1992**

**COURSE SCHEDULE**

Week I

6/22/92

Monday February 17	Tuesday February 18	Wednesday February 19	Thursday February 20	Friday February 21
 <p><i>Presidents'</i> <i>Day</i> <b>HOLIDAY</b></p>	<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 - 12:00 Team Presentations</p>	<p>8:30 - 12:30 Breastfeeding and Child Survival -A. Naylor</p>	<p>8:00 - 9:45 Management of Successful Breastfeeding -R. Wester -M. Kroeger</p> <p>10:00 - 11:15 Maternal Problems Impacting Successful Lactation and Breastfeeding -E. Creer</p> <p>11:30 - 12:00 Orientation to Program Planning Assignment -J. Schooley</p>	<p>8:00 - 8:30 Discussion -A. Naylor -R. Wester</p> <p>8:45 - 10:15 Infant Oral-Motor Assessment and Management -K. Bouma</p> <p>10:30 - 11:30 Approach to the Management of Infant Problems Impacting Successful Lactation and Breastfeeding -R. Wester -W. Slusser</p> <p>11:30 - 12:00 Review of Diarrheal Disease Control and Breastfeeding -W. Slusser</p>
	12:00 - 1:00 <b>LUNCH</b> with faculty and staff	12:30 - 1:30 <b>LUNCH</b>	12:00 - 1:00 <b>LUNCH</b>	12:00 - 1:00 <b>LUNCH</b>
		<p>1:30 - 5:00 Anatomy and Physiology of Lactation -M. Neville</p>	<p>1:00 - 5:00 Program Planning and Evaluation -A. Brownlee</p>	<p>1:00 - 2:30 Tour of UCSD -L. Scott -R. Wester</p> <p>2:45 - 3:00 Orientation to Clinical Experiences -W. Slusser -M. Kroeger</p> <p>3:00 - 4:00 Review of Effective Counseling in Lactation Management -W. Slusser -M. Kroeger</p>

Monday February 24	Tuesday February 25	Wednesday February 26	Thursday February 27	Friday February 28
<p>8:00 - 10:15 Mother to Infant Biochemical and Immunological Transfer Through Human Milk -M. Hamosh</p> <p>10:30 - 12:30 Maternal Nutrition -V. Newman</p>	<p>8:30 - 9:45 Hospital Rounds (Classroom 8:15) Gwan Etim-Okon Obong Njodzefon Bongang</p> <p>10:00 - 11:00 Breastfeeding and Jaundice -N. Powers</p> <p>11:15 - 12:15 Breast Health -M. Kroeger</p> <p>12:30 - 1:15 The Role of Nutrition in Breast Health -V. Newman</p>	<p>8:00 - 9:30 AIDS and Breastfeeding -A. Ruff</p> <p>9:45 - 11:45 Induced and Relactation -E. Jones -A. Naylor</p> <p>12:00 - 1:00 The Infant with Cleft Lip and/or Palate -E. Jones</p>	<p>10:00 - 11:15 Infant Nutrition and Weaning -V. Newman</p> <p>11:30 - 1:00 Slow Gain/Insufficient Milk Syndrome -N. Powers</p>	<p>8:30 - 9:45 Hospital Rounds (Classroom 8:15) Baye Ofere Simo Nankam Raney Rasmussen</p> <p>10:00 - 1:00 Clinical Experiences  <i>Lactation Clinic (Clinic House)</i> Gwan Etim-Okon Obong Bongang Simo Njodzefon</p> <p><i>Nutrition Counseling (Vicky's Office)</i> Baye Ofere Nankam</p>
<p>12:30 - 1:30 LUNCH</p>		<p>1:00 - 2:00 LUNCH</p>	<p>1:00 - 2:00 LUNCH</p>	<p>1:00 - 2:00 LUNCH</p>
<p>1:30 - 4:30 Clinical Experiences  <i>Lactation Clinic (Clinic House)</i> Baye Ofere Gwan Nankam Etim-Okon Njodzefon</p> <p><i>Nutrition Counseling (Vicky's Office)</i> Obong Bongang Simo</p>	<p>1:15 - 2:45 Discussion of Cultural Traditions and Beliefs Related to Infant Feeding (LUNCH PROVIDED)</p> <p>3:00 - 3:30 Film: "Amazing Newborn"</p> <p>3:45 - 5:45 Psychosocial and Cultural Aspects of Infancy: Implications for Breastfeeding -S. Dixon</p>	<p>2:00 - 5:00 Clinical Experiences  <i>Lactation Clinic (Clinic House)</i> Obong Bongang Simo Baye Ofere Nankam</p> <p><i>Nutrition Counseling (Vicky's Office)</i> Gwan Etim-Okon Njodzefon</p>	<p>2:00 - 6:00 Program Planning Workshops -A. Brownlee -Z. Cover</p>	<p>2:00 - 3:30 Safety and Therapeutic Aspects of Kangaroo Care for Premature Infants -S. Ludington</p> <p>3:45 - 5:00 Growth Monitoring Programs -V. Newman</p>

Week III

6/22/92

Monday March 2	Tuesday March 3	Wednesday March 4	Thursday March 5	Friday March 6
<p>8:30 - 9:45 Counseling Practicum -Faculty Baye Etim-Okon Gwan Nankam Ofere Rasmussen</p> <p>10:00 - 11:30 Contraindication and Controversies -A. Naylor</p> <p>11:45 - 1:00 Drugs and Contaminants -P. Anderson</p>	<p>8:30 - 9:45 Counseling Practicum -Faculty Obong Bongang Simo Njodzefon Ramey Holley</p> <p>10:00 - 11:30 The Effect of Continuous Social Support During Labor on Perinatal Morbidity -M. Klaus</p> <p>11:45 - 12:30 Orientation to Standardized Patients -E. Creer -J. Schooley</p>	<p>8:00 - 8:15 Introduction -A. Naylor</p> <p>8:15 - 9:15 TBA Training -Mary Kroeger</p> <p>9:30 - 11:00 Women, Work, and Breastfeeding -C. O'Gara</p> <p>11:15 - 12:00 Mothers' Support Groups -J. Canahuati</p> <p>12:15 - 12:30 Wrap-up -A. Naylor</p>	<p>8:00 - 9:45 Comparative Lactation -A. Naylor</p> <p>10:00 - 1:00 Clinical Experiences</p> <p><i>Lactation Clinic (Clinic House)</i> Obong Bongang Simo Ramey Holley</p> <p><i>Breast Exam Review (Classroom)</i> Baye Ofere Gwan Etim-Okon Nankam Njodzefon</p>	<p>8:00 - 11:00 Comparative Lactation Field Trip to the San Diego Wild Animal Park -L. Killmar</p>
<p>1:00 - 2:00 LUNCH</p>	<p>12:30 - 1:30 LUNCH</p>	<p>12:30 - 1:30 LUNCH</p>	<p>1:00 - 2:00 LUNCH</p>	
<p>2:00 - 6:00 Curriculum Design -L. Bruce</p>	<p>1:30 - 4:30 Clinical Experiences</p> <p><i>Lactation Clinic (Clinic House)</i> Baye Ofere Gwan Etim-Okon Nankam Njodzefon</p> <p><i>Nutrition Counseling (Vicky's Office)</i> Ramey Holley</p> <p><i>Breast Exam Review (Classroom)</i> Obong Bongang Simo</p>	<p>1:30 - 5:30 Program Planning Workshops -A. Brownlee -E. Creer</p>	<p>2:00 - 4:00 Breastfeeding, Fertility, and Child Spacing -E. Newton</p> <p>4:15 - 4:30 Orientation to Field Trip -P. Faucher</p>	<p>11:00 - 6:00 Intercultural Orientation -Faculty</p>

Monday March 9	Tuesday March 10	Wednesday March 11	Thursday March 12	Friday March 13
<p>8:00 - 10:00 Human Milk for the Preterm Infant -R. Schanler</p> <p>10:15 - 12:15 Lactation Management for Mothers of Preterm Infants -R. Wester -L. Scott -K. Bouma</p>	<p>8:30 - 9:45 Oral-Motor Rounds (Classroom 3:15) Obong Bongang Simo Ofere Baye Holley</p> <p>10:00 - 11:00 Lactation Management in Medical Programs -N. Powers -E. Creer -V. Newman</p> <p>11:15 - 1:00 Programs to Promote and Protect Breastfeeding -A. Naylor</p>	<p>10:00 - 1:00 Standardized Patients/ Audiovisual Reviews</p> <p><i>Standardized Patients</i> Baye Ofere Gwan Etim-Okon Njodzefon Nankam</p> <p><i>Videotape Review</i> (Library) Obong Bongang Simo Ramey Holley</p>	<p>8:30 - 9:45 Oral-Motor Rounds (Classroom 8:15) Ramey Nankam Gwan Etim-Okon Njodzefon</p> <p>10:00 - 1:00 Standardized Patients/ Audiovisual Reviews</p> <p><i>Standardized Patients</i> Obong Bongang Simo Ramey Holley</p> <p><i>Videotape Review</i> (Library) Baye Ofere Gwan Etim-Okon Njodzefon Nankam</p>	<p>10:00 - 12:00 Team Program Plan Presentations -Faculty -D. Jelliffe -EFP Jelliffe</p> <p>12:00 - 12:30 Film: "Breastfeeding: Protecting a Natural Resource"</p>
<p>12:15 - 1:30 LUNCH</p>	<p>1:00 - 2:00 LUNCH</p>	<p>1:00 - 2:00 LUNCH</p>	<p>1:00 - 2:00 LUNCH</p>	<p>12:30 - 1:30 LUNCH</p>
<p>1:30 - 4:30 Standardized Patients/ Audiovisual Reviews</p> <p><i>Standardized Patients</i> Baye Ofere Gwan Etim-Okon Njodzefon Nankam</p> <p><i>Slide/Tape Set Review</i> (Library) Obong Bongang Simo Ramey Holley</p> <p>5:30 - 8:30 Teaching Resources Review and Selection</p>	<p>2:00 - 5:00 Standardized Patients/ Audiovisual Reviews</p> <p><i>Standardized Patients</i> Obong Bongang Simo Ramey Holley</p> <p><i>Slide/Tape Set Review</i> (Library) Baye Ofere Gwan Etim-Okon Njodzefon Nankam</p>	<p>2:00 - 4:00 Professional Roles and Responsibilities on the Multidisciplinary Team -M. Kroeger -W. Slusser -V. Newman</p> <p>4:15 - 5:45 Case Management Review Session -A. Naylor -L. Scott</p>	<p>2:00 - 3:30 Formula Marketing and the WHO Code -J. Schooley -E. Creer</p> <p>3:45 - 5:45 Consultant's Report Seminar (Review of 20 Questions Assignment) -A. Naylor -V. Newman -W. Slusser</p>	<p>1:30 - 3:30 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**  
**February 18 - March 13, 1992**

**FACULTY AND STAFF**

**WELLSTART CORE FACULTY**

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Ann Brownlee, PhD  
Field Services/Evaluation Coordinator

Nancy Powers, MD, FAAP  
Director, Professional Services

Elizabeth Creer, FNP, MPH  
Family Nurse Practitioner

Destry Ramy, CPNP  
Pediatric Nurse Practitioner

Mary Kroeger, RN, CNM, MPH  
Nurse-Midwife

Wendelin Slusser, MD, MS  
Pediatrician

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

Lois Scott, RN  
Lactation Specialist

Vicky Newman, RD, MS  
Perinatal Nutritionist

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

**ADJUNCT FACULTY**

---

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

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

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

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

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

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

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

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

Margit P. Hamosh, PhD  
Chief, Division of Developmental Biology and  
Nutrition  
Department of Pediatrics  
Georgetown University Medical Center  
Washington, DC

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

Derrick P. Jelliffe, MD  
Population and Family Health Division  
University of California, Los Angeles  
School of Public Health  
Los Angeles, California

Margaret C. Neville, PhD  
Professor and Acting Chair of Physiology  
University of Colorado Health Sciences Center  
Denver, Colorado

Edward Newton  
Department of OB/GYN  
Health Services Center  
University of Texas  
San Antonio, Texas

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

Chloe O'Gara, EdD  
Director, Breastfeeding Project  
Wellstart  
Washington, DC

Judy Weiner de Canahuati, BA  
Outreach Advisor  
Wellstart  
Washington, DC

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

#### **ADMINISTRATIVE STAFF**

---

Cynthia Collins  
Staff Assistant

Ingrid Gulve  
MCH Project Secretary

Lisa Daigle  
Financial Manager

Monica King  
Education Program Assistant

Sara Fasolino  
Receptionist

Lynn Nelson  
Accounting Assistant

Patricia Faucher, MPH  
Education Services Coordinator

Janine Schooley, MPH  
Director, Education Program Services

Kathleen Finn, MA  
Administrative Services Director

Marlene Turpin  
Medical Biller/Secretary

Ann Fulcher  
Program Assistant

Gail Ugarte, RD, MPH  
MCH Project Coordinator

Patricia Gage, MA, RD  
Staff Assistant

Elena VanderWiel  
Executive Secretary

Leslie Gallaway  
Word Processor

Susan Walker  
Administrative Assistant

Carol Guenther  
Senior Word Processor

#### **TRANSLATORS**

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Momy Escalona

Judy McLean

**APPENDIX 4**

**Pre and Post Test Scores Summary**

**WELLSTART**  
**Lactation Management Education Program**  
**February 18 - March 13, 1992**

**PRE- AND POST-TEST SUMMARY**

Team	Disc.	Name	Pre-Test			Post-Test			Difference Between Pre- and Post-Test Scores (% Correct)
			# Incorrect	# Correct	% Correct	# Incorrect	# Correct	% Correct	
UnC	Ped	Obot Antia-Obong	10	20	66.67	8	22	73.33	6.66
CHY	Ped	Martina Baye	20	10	33.33	10	20	66.67	33.34
CHY	Ped	Agnes Bongang	18	12	40.00	9	21	70.00	30.00
UnC	Oth	Doris Etim-Okon	20	10	33.33	9	21	70.00	36.67
CHY	Ped	Esther Gwan	15	15	50.00	7	23	76.67	26.67
CHY	OthP	Edwin Kimbo	15	15	50.00	9	21	70.00	20.00
CHY	N	Justine Nankam	15	15	50.00	13	17	56.67	6.67
UnC	N	Clara Ofere	22	8	26.67	11	19	63.33	36.66
CHY	N	Monique Simo	18	12	40.00	14	16	53.33	13.33
<b>GROUP AVERAGES</b>			17.00	13.00	43.33	10.00	20.00	66.67	23.33

CHY: Central Hospital, Yaounde, Cameroon  
 UnC: University of Calabar, Calabar, Nigeria

N = Nurse or Nurse-Midwife (3)  
 Ped = Pediatrician or Neonatologist (4)  
 Oth = Other Non-Physician (1)  
 OthP = Other Physician (1)

**Comparison of Pre- and Post-Test Scores (% Correct) by Team and Discipline**

Team ↓ Discipline	Pre-Test			Post-Test			Difference Between Pre- and Post-Test Scores (% Correct)		
	CHY	UnC	Disc. Avg.	CHY	UnC	Disc. Avg.	CHY	UnC	Disc. Avg.
Nurse (3)	50	27	39.0	57	63	57.7	7	36	18.7
	40			53			13		
Other Non-Physician (1)		33	33.0		70	70.0		37	37.0
Pediatrician (4)	33	67	47.5	67	73	71.8	34	6	24.3
	40			70			30		
	50			77			27		
Other Physician (1)	50		50.0	70		70.0	20		20.0
Total Physician Average by Team	43.3	67.0		71.0	73.0		27.8	6.0	
Total Team Average	43.8	42.3		65.7	68.7		21.8	26.3	

**APPENDIX 5**  
**Course Evaluation Summary**

**WELLSTART**  
**Lactation Management Education Program**  
**February 18 - March 13, 1992**

**SUMMARY OF OVERALL COURSE EVALUATION**

**SCALES USED FOR OVERALL COURSE EVALUATION RATINGS**

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

A total of nine evaluations were completed on the final day of the course with the following breakdown of disciplines indicated: three nurses or nurse-midwives; four pediatricians or neonatologists; one other physician; and one other non-physician (Principal Community Health Officer).

	Nurs	Oth	Ped	Oth Phys	Physician		Group		
					Avg	Tot	Avg	Tot	
<b>VIDEOTAPES SHOWN DURING COURSE/SEMINARS</b>									
<b>"Amazing Newborn"</b>									
Usefulness <sup>1</sup>	4.7	5.0	4.8	5.0	4.8		4.8		
<b>"Breastfeeding — Protecting a Natural Resource"</b>									
Usefulness <sup>1</sup>	5.0	5.0	5.0	5.0	5.0		5.0		
<b>"Feeding Low Birth Weight Babies"</b>									
Usefulness <sup>1</sup>	5.0	5.0	5.0	5.0	5.0		5.0		
<b>NON-DIDACTIC ACTIVITIES</b>									
<b>Orientation to Program Planning Assignment</b>									
Usefulness <sup>1</sup>	4.5	5.0	5.0	5.0	5.0		4.9		
<b>Program Planning Workshops</b>									
Usefulness <sup>1</sup>	5.0	5.0	5.0	5.0	5.0		5.0		
# of sessions: not enough	2	1	4	1		5		8	
just right	1					0		1	
too many									
not answered									
<b>Orientation to Clinical Experiences</b>									
Usefulness <sup>1</sup>	5.0	5.0	5.0	5.0	5.0		5.0		
<b>Tour of UCSD</b>									
Usefulness <sup>1</sup>	5.0	5.0	4.5	5.0	4.6		4.8		

	Nurs	Oth	Ped	Oth Phys	Physician		Group	
					Avg	Tot	Avg	Tot
<b>Hospital Rounds</b>								
Usefulness <sup>1</sup>	5.0	5.0	5.0	5.0	5.0		5.0	
# of sessions: not enough	2	1	2	1		3		6
just right	1		2			2		3
too many								
not answered	1					0		1
# of patients: not enough	2		2	1		3		5
just right		1	1			1		2
too many								
not answered	1		1			1		2
<b>Oral-Motor Assessment Rounds</b>								
Usefulness <sup>1</sup>	5.0	5.0	5.0	5.0	5.0		5.0	
# of sessions: not enough	1	1	2	1		3		5
just right	1		2			2		3
too many								
not answered	1					0		1
# of patients: not enough	1	1	2	1		3		5
just right			1			1		1
too many								
not answered	2		1			1		3
<b>Counseling Practicum</b>								
Usefulness <sup>1</sup>	5.0		5.0	5.0	5.0		5.0	
# of sessions: not enough			2	1		3		3
just right	2	1	2			2		5
too many								
not answered	1					0		1
# of patients: not enough				1		1		1
just right	1	1	3			3		5
too many								
not answered	2		1			1		3

	Nurs	Oth	Ped	Oth Phys	Physician		Group	
					Avg	Tot	Avg	Tot
<b>Lactation Clinic</b>								
Usefulness <sup>1</sup>	5.0		5.0	5.0	5.0		5.0	
# of sessions: not enough		1		1		1		2
just right	3		4			4		7
too many								
not answered								
# of patients: not enough	1	1	1	1		2		4
just right	1		2			2		3
too many								
not answered	1		1			1		2
<b>Orientation to Standardized Patients</b>								
Usefulness <sup>1</sup>	4.7	5.0	5.0	5.0	5.0		5.0	
<b>Standardized Patients</b>								
Usefulness <sup>1</sup>	4.5		5.0	5.0	5.0		5.0	
# of sessions: not enough	2	1				0		3
just right	1		4	1		5		6
too many								
not answered								
# of patients: not enough	1	1	2			2		4
just right			1	1		2		2
too many								
not answered	2		1			1		3
<b>Nutrition Counseling</b>								
Usefulness <sup>1</sup>	5.0	5.0	5.0	5.0	5.0		5.0	
# of sessions: not enough	3	1	2	1		3		7
just right			1			1		1
too many								
not answered			1			1		1
# of patients: not enough	1	1	1	1		2		4
just right			1			1		1
too many								
not answered	2		2			2		4
<b>Breast Exam Review Session</b>								
Usefulness <sup>1</sup>	5.0	5.0	5.0	5.0	5.0		5.0	
<b>Video Tape Review Session</b>								
Usefulness <sup>1</sup>	5.0	5.0	5.0	5.0	5.0		5.0	

	Nurs	Oth	Fed	Oth Phys	Physician		Group	
					Avg	Tot	Avg	Tot
<b>Slide Set Review Session</b>								
Usefulness <sup>1</sup>	4.3	5.0	5.0	5.0	5.0		4.8	
<b>Field Trip to San Diego Wild Animal Park</b>								
Usefulness <sup>1</sup>	4.3	5.0	5.0	-	5.0		4.8	
<b>MATERIALS PROVIDED</b>								
<b>Course Syllabus</b>								
Ease of reading <sup>3</sup>	4.5	5.0	5.0	5.0	5.0		4.9	
Helpfulness <sup>5</sup>	4.7	5.0	5.0	5.0	5.0		4.9	
<b>Course Textbooks</b>								
Usefulness <sup>1</sup>	5.0	5.0	5.0	5.0	5.0		5.0	
Collective set was:	not enough							
	just right	3	1	4	1		5	9
	too many							
	not answered							
Use in future:	Yes	3	1	4	1		5	9
	No							
<b>Team Reprint Collection</b>								
Usefulness <sup>1</sup>	5.0	5.0	5.0	5.0	5.0		5.0	
Collective set was:	not enough							
	just right	2	1	4	1		5	8
	too many							
	not answered	1					0	1
Use in future:	Yes	3	1	4	1		5	9
	No							
<b>MISCELLANEOUS IMPORTANT MATTERS</b>								
<b>The English Language</b>								
Understandability <sup>2</sup>	5.0	5.0	5.0	5.0	5.0		5.0	
Ease of reading <sup>3</sup>	4.0	5.0	5.0	5.0	5.0		4.7	
Ease of Speaking <sup>4</sup>	2.7	5.0	5.0	5.0	5.0		4.2	

22

	Nurs	Oth	Ped	Oth Phys	Physician		Group	
					Avg	Tot	Avg	Tot
<b>Hotel Accommodations</b>								
Adequacy <sup>6</sup>	5.0	5.0	5.0	5.0	5.0		5.0	
Mail service: adequate	3	1	4	1		5		9
not adequate								
not answered								
Telephone: adequate	2	1	4	1		5		8
not adequate	1					0		1
not answered								
Hotel van: adequate	3	1	4	1		5		9
not adequate								
not answered								
Use in future? yes	3	1	4	1		5		9
no								
not answered								
<b>OVERALL EVALUATION</b>	4.7	5.0	5.0	5.0	5.0		4.9	
Usefulness of providing this program to multidisciplinary teams <sup>1</sup>								
Increase in knowledge <sup>7</sup>	5.0	5.0	5.0	5.0	5.0		5.0	
Recommend this program be provided for other health professionals from developing nations.	3	1	4	1		5		9
yes								
no								
not answered								
General Rating								
excellent	2	1	3	1		4		7
very good	1		1			1		2
good								
fair								
poor								

**APPENDIX 6**  
**Team Program Plans**

**LACTATION MANAGEMENT PROGRAMME  
PROMOTING EXCLUSIVE BREASTFEEDING  
FROM BIRTH TO 4-6 MONTHS AND  
PROPER WEANING THEREAFTER  
IN THE  
REPUBLIC OF CAMEROON**

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Presented March 13, 1992

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## I. INTRODUCTION

Breastfeeding is of vital importance as a child survival strategy. Breastmilk is the complete nourishment; safe, hygienic, inexpensive and helps fight common infections. Breastmilk alone is the best possible food and drink in the first four to six months of life and virtually every mother can breast-feed her baby. Milk production is enhanced by frequent suckling. Bottle feeding can lead to illness and death.

The promise to the world's children made at the First World Summit for Children in September 1990 included among other things, information and assistance to all mothers in successful breastfeeding by the year 2000 (1).

### A. TRENDS

The trend towards the promotion, protection and support of breastfeeding after an initial decline in the developed countries underlines the fact that the case against the bottle is not related to the ability to purchase formula. In the developing world where sometimes over half the population live below the absolute poverty level, most bottlefed babies are often given powdered milk overdiluted with unsafe water in unsterile bottles. Such babies are several times more likely to die in infancy than breastfed babies.

The current world economic recession and its tragic impact on the developing world has brought many of its nations to adopt desperate structural adjustment measures that in most cases have further increased the plight of the poor. It is at this point that the need to protect natural resources is greatest.

Breastfeeding is one of every nation's most valuable natural resources. Upon it depends the future of the nation. It is the key to the survival of its generations to come.

### B. CAMEROON

The Republic of Cameroon is a developing country in Africa. It is a triangular wedge strategically situated at crossroads between central and West Africa and extends from the Gulf of Guinea to the shores of Lake Chad. Often termed Africa in miniature, its 475,000 km<sup>2</sup> land surface stretches through the main climactic zones of Africa. With a unique bilingual culture of French and English, and a reputation of internal stability and peaceful coexistence with its neighbours, Cameroon, self sufficient in food production, was still thriving when most third world countries knew the most precipitous declines in their economies. Its present population is estimated at 11,482,000 inhabitants. The yearly population growth rate is 2.9%; the Gross National Product per capita (GNP) is US \$1010. The national economic growth rate has known a rapid deceleration since 1985, with a negative balance since 1987 and an external debt service of 12% in 1988. The average family size is 7 people; life expectancy from birth is 54 years. The crude birth and death rates are respectively 43 per thousand and 14 per thousand. 40% of the population is urban while 60% is rural with a rapid increase in urbanization due to rural exodus in search of job opportunities. Children below 15 years constitute 47% of the total population while women of childbearing age constitute 22.7% (2-5).

### C. HEALTH CARE IN CAMEROON

Health care provision in Cameroon, until recently was centered heavily on a hospital model inherited from the colonial era. However, with the advent of the Alma Ata Declaration of 1978 (6), many praiseworthy efforts have been made to develop a primary health care approach to provide health for all by the year 2000. The rapid expansion in man power and infrastructural development has seen the total number of health care providers (doctors, nurses, nurse-aides) jump from 16,281 in 1987 to 25,136 in 1989 with the doctor:population ratio rapidly improving over the same period. The present doctor/population ration is 1:11,128. Most health care providers are trained in one medical school, 28 nursing and midwifery schools and 15 nurse-aides schools. Paradoxically, the national budget allocated to health has remained constant below 5% over the last 8 years (7), thus greatly compromising the quality of health care at a time when inflation was rising steeply.

### D. BREASTFEEDING IN CAMEROON

The 1991 Cameroon Demographic and Health Survey (8) is the most current source of information providing data on breastfeeding of children aged 0-12 months, and on the use of the bottle. It appears that the initiation of breastfeeding is very widespread since 99.8% of children aged 0-3 months old are breastfed. This proportion remains as high as 89.7% for all children at the age of 10-12 months. At 10-12 months, 77.1% of children receive breastmilk and supplementary solid or mashed food.

### E. RATIONALE FOR BREASTFEEDING PROMOTION IN CAMEROON

Quantitatively, Cameroonian mothers are doing excellently at breastfeeding and actually deserve to be congratulated. The quality of breastfeeding, however, leaves much to be desired. Use of the bottle is relatively high from a young age, with 18.1% of children 0-3 months taking the bottle. Only 7.1% of babies 0-3 months old are exclusively breastfed and this proportion falls precipitously to 0.8% at 4-6 months! Supplementation with water, other liquids and solid or mushy foods is done as early as 0-3 months. On the other hand, inappropriate weaning is also reflected by the fact that 1.1% of children 7-9 months old and 0.9% at 10-12 months are still exclusively on breastmilk. A recent study carried out in Maroua, one of the hottest regions in the country shows, not only that supplementation with water is unnecessary in exclusively breastfed babies aged 0-6 months, but also that 100% of 17 samples of water fed to these babies were contaminated with enteropathogens, especially E coli and Klebsiella (9).

Probably resulting from this wide scale early supplementation with contaminated water and thin gruels made from local staples, children between 6 months and two years of age are most susceptible to having diarrhoea (8). Diarrhoea is the third most frequent cause of morbidity in children aged 0-11 months (following malaria and acute respiratory infections) and the 4th most important cause of mortality contributing to 12.9% of deaths in the same age group (10). A national programme for the control of diarrhoeal diseases has been going on since 1987 (10-13), and recommends breastfeeding as one of the strategies to prevent malnutrition in a baby with diarrhoea. The 1978 National Nutrition Survey reported that 21% of children 0-5 years suffered from chronic malnutrition with children in their second year of life most affected (14).

**These results show that although breastfeeding may be widespread in Cameroon, there is a big need to provide accurate information on proper breastfeeding practices and weaning. We strongly believe that this project will go a long way to provide the solutions to this problem. It will also provide a base on which breastfeeding management can be built and incorporated into routine health care provision in Cameroon.**

## TRAINING WORK PLAN

	1992	1993	1994	1995	1996
	Year 1	Year 2	Year 3	Year 4	Year 5
January					
February			Mid-Term Evaluation of 1st 3 provinces	Mid-Term Evaluation of 2nd 4 provinces	Mid-Term Evaluation of last 3 provinces
March	Policy Workshop	2nd Supervisory visits to 3 provinces of 1st T.O.T. Workshop	2nd Supervisory visits to 4 provinces of 2nd T.O.T. Workshop	2nd Supervisory visits to 3 provinces of 3rd T.O.T. Workshop	
April	Adaptation of -curriculum				
May	Develop -Teaching aids - KABP baseline				
June	data questionnaires	Refresher course Prep. for Div. training of 1st TOT Workshop	Refresher course Prep. for Div. training of 2nd TOT Workshop	Refresher course Prep. for Div. training of 3rd TOT Workshop	
July	Selection and invitations. 1st TOT Workshop (4 participants each from 3 provinces)	Simultaneous divisional TOT workshops in each of 3 provinces	Simultaneous divisional TOT workshops in each of 4 provinces	Simultaneous divisional TOT workshops in each of last 3 provinces	
August	Collect KABP baseline data and analyze for 1st TOT workshop	Collect KABP baseline data and analyze for 2nd TOT workshop	Collect KABP baseline data and analyze for 3rd TOT workshop		
September	1st TOT Workshop 2 weeks in Yaounde (1st 3 provinces)	2nd TOT Workshop 2 weeks in Yaounde (2nd 4 provinces)	3rd TOT Workshop 2 weeks in Yaounde (last 3 provinces)		
October	Sensitization visit to administrators of the 3 provincial hospitals of 1st TOT Workshop.	Sensitization visit to administrators of the 4 provincial hospitals of 2nd TOT Workshop.	Sensitization visit to administrators of the last 3 provincial hospitals.		

	1992	1993	1994	1995	1996
	Year 1	Year 2	Year 3	Year 4	Year 5
November					
December	1st Supervisory visit to the 3 provinces of 1st TOT Workshop.	1st Supervisory visit to provinces of 2nd TOT Workshop.	1st Supervisory visit to provinces of 3rd TOT Workshop.		Final evaluation of all 10 (ten) provinces.

NB evaluation includes KABP/training follow-up.

## YEARLY PLAN OF TRAINING ACTIVITIES

1992

ACTIVITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
NATIONAL POLICY WORKSHOP												
ADAPTATION OF TEACHING CURRICULUM												
PREPARATION OF TEACHING AIDS												
DEVELOP KABP BASELINE DATA QUESTIONNAIRES												
SELECTION & INVITATIONS FOR FIRST TOT WORKSHOP												
COLLECT KABP BASELINE DATA AND ANALYZE FOR 1ST TOT WORKSHOP												
FIRST TOT WORKSHOP - 3 PROVINCES - 2 WEEKS IN YAOUNDE												
SENSITIZATION VISIT TO ADMINISTRATORS OF THE 3 PROVINCIAL HOSPITALS OF 1ST TOT WORKSHOP												
1ST SUPERVISORY VISIT TO THE 3 PROVINCES OF THE 1ST TOT WORKSHOP												

## YEARLY PLAN OF TRAINING ACTIVITIES

1993

ACTIVITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2ND SUPERVISORY VISIT TO 3 PROVINCES OF 1ST TOT WORKSHOP												
REFRESHER COURSE/PREP. FOR DIVISIONAL TRAINING OF TOT WORKSHOP												
SIMULTANEOUS DIVISIONAL TOT WORKSHOPS IN EACH OF THE 3 PROVINCES												
COLLECT KABP BASELINE DATA AND ANALYZE FOR 2ND TOT WORKSHOP												
2ND TOT WORKSHOP - 2 WEEKS IN YAOUNDE NEXT 4 PROVINCES												
SENSITIZATION VISIT TO ADMINISTRATORS OF THE 4 PROVINCIAL HOSPITALS OF 2ND TOT WORKSHOP												
FIRST SUPERVISORY VISIT TO PROVINCES OF 2ND TOT WORKSHOP												

32

## YEARLY PLAN OF TRAINING ACTIVITIES

1994

ACTIVITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MID-TERM EVALUATION OF 1ST 3 PROVINCES												
2ND SUPERVISORY VISIT TO PROVINCES OF 2ND TOT WORKSHOP												
REFRESHER COURSE/PREP. FOR DIVISIONAL TRAINING OF 2ND TOT WORKSHOP												
SIMULTANEOUS DIVISIONAL TOT WORKSHOPS IN EACH OF 6 PROVINCES												
COLLECT KABP BASELINE DATA AND ANALYSE FOR 3RD TOT WORKSHOP												
3RD TOT WORKSHOP - 2 WEEKS IN YAOUNDE (LAST 3 PROVINCES)												
SENSITIZATION VISIT TO ADMINISTRATORS OF LAST 3 PROVINCIAL HOSPITALS												
FIRST SUPERVISORY VISIT TO PROVINCES OF 3RD TOT WORKSHOP												

13  
13

## YEARLY PLAN OF TRAINING ACTIVITIES

1995

ACTIVITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MID-TERM EVALUATION OF 2ND 4 PROVINCES												
2ND SUPERVISORY VISIT TO PROVINCES OF 3RD TOT WORKSHOP												
REFRESHER COURSE/PREP. FOR DIVISIONAL TRAINING OF 3RD TOT WORKSHOP												
SIMULTANEOUS DIVISIONAL TOT WORKSHOPS IN EACH OF THE LAST 3 PROVINCES												

21

# YEARLY PLAN OF TRAINING ACTIVITIES

1996

ACTIVITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MID-TERM EVALUATION OF LAST 3 PROVINCES												
FINAL EVALUATION OF ALL TEN (10) PROVINCES												

56

**II. PROGRAM GOAL**

Promote exclusive breastfeeding in infants from birth to 4-6 months of age and proper weaning thereafter.

### III. OBJECTIVES

- A. Set up a National Centre for information, training and research on lactation management in Yaounde by the end of June 1992.
- B. Train 40 health care providers from all regions of the country, as trainers - at the National Centre, who will in turn train others. A total of 2000 health professionals will be thus trained by the end of five years (1997).
- C. Contribute to the integration of lactation management in the curricula of health training schools within a year of onset of program.
- D. Develop social marketing strategy for the promotion and protection of breastfeeding in health facilities and the community by the end of the first year of the project.
- E. Carry out research on breastfeeding related issues in health services and the community throughout the life of the program.
- F. Carry out evaluation (baseline, midterm and final): By the end of the program, 75% of staff dependent on trainees in selected health facilities will acquire good lactation management skills and at least 50% of mothers leaving postpartum units - must have initiated exclusive breastfeeding at birth and continued to 4-6 months and thereafter up to 12 months with complementary foods.

PROGRAM OBJECTIVES	ACTIVITIES	RESOURCES	
		MATERIAL	HUMAN
I. Setting up a National Centre for information training and research on lactation management	1) Integration of lactation management program in already existing MCH activities - family planning, EPI, & CDD programmes 2) Define and distribute tasks (program coordinator/personnel)	Office/Library furniture Typewriter Stationary	- Wellstart graduates - Health personnel - Secretary - Coordinator
II. • Training	See detailed Training Work Plan (table)	Training module Training aids: Slide and overhead projectors, handouts, dolls, food samples, chalk flipcharts, stationery	- Wellstart graduates - Health personnel - Administrators
III. Contribute to integration of lactation management to curricula of health training schools	- Information and sensitization meeting with heads of school, administrators at ministerial levels (multisectorial) - Proposal - training at Wellstart for teachers and some administrators - Proposal - review of curricula	Textbooks Reprints Slides Video films	- School heads and teachers
IV. Develop social marketing strategy for promoting and protecting breastfeeding	- Dialogue with leaders of community groups, market women, churches, village heads - Also in health facilities and other related bodies - Decision makers - Develop oral/written/visual messages	- Handouts - Posters - International Code of Marketing of Formula - Posters - Slogans - Radio - Television	- Community leaders - Mothers - Health personnel - Model

PROGRAM OBJECTIVES	ACTIVITIES	RESOURCES	
		MATERIAL	HUMAN
V. Research	<ul style="list-style-type: none"> <li>- Baseline study (KABP)</li> <li>- Proposal of research topics to medical schools</li> <li>- To trainers (clinical research)</li> </ul>	<ul style="list-style-type: none"> <li>- Health facilities</li> <li>- Questionnaires</li> <li>- Stationery</li> </ul>	<ul style="list-style-type: none"> <li>- Trainers/Trainees</li> <li>- Statistician</li> <li>- Programme Coordinator</li> <li>*SPONSORS*</li> </ul>
VI. Evaluation	<ul style="list-style-type: none"> <li>- KABP Baseline</li> <li>- Training evaluation (midterm to final)</li> </ul>	<ul style="list-style-type: none"> <li>- Stationery</li> <li>- Questionnaires</li> <li>- Logistics (transport per diem)</li> <li>- Supervisor checklist</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- Statisticians</li> <li>- Trainers</li> <li>- SPONSORS</li> </ul>

**1. NATIONAL CENTRE FOR INFORMATION TRAINING AND RESEARCH ON LACTATION MANAGEMENT**

This centre will be the base for documentation and diffusion of information on breastfeeding and lactation management. A coordinator for the lactation management program will be based at this centre. Centre activities and resources are expected to expand as the program grows.

**2. TRAINING OF HEALTH CARE PROVIDERS**

The training of trainers will constitute the primary focus of program activities. Training activities are planned over a five year period during which all ten provinces of the Republic will be covered.

**3. CONTRIBUTION TO THE INTEGRATION OF LACTATION MANAGEMENT IN THE CURRICULA OF TRAINING OF HEALTH CARE PROVIDERS**

Medical and nursing/midwifery school teachers will be sensitized on the current international commitment to promote breastfeeding. Information on problems related to breastfeeding will be shared. The need to empower health care providers during their training with skills that will enable them to successfully manage lactation problems will be emphasized. Efforts will be made to ensure the training of a team of such teachers on lactation management at an internationally recognized training centre. They will then be expected to make the necessary changes on the curricula of training of health care providers.

**4. DEVELOPMENT OF A SOCIAL MARKETING STRATEGY FOR THE PROMOTION AND PROTECTION OF BREASTFEEDING IN HEALTH FACILITIES AND IN COMMUNITIES**

The mass media and all organized forums related to health care provision and nutrition, will be used to promote, protect and support breastfeeding. Slogans, posters, sketches, etc., will be developed or adapted for breastfeeding promotion in strategic places. Opportunities will be sought to identify, train and use models strategically as trend setters.

**5. RESEARCH**

Applied research will be carried out throughout the life of the project. All results from such studies will be used to constantly improve on program activities. Service with core trainers at central or provincial level which may not be selected for the national training program should be encouraged to, and assisted to carry out baseline research which can also be used to evaluate the impact of their training on their services as the program develops.

**6. EVALUATION**

Baseline and midterm evaluations will be used to assess progress of the program. They will also provide a basis for remodelling future activities in response to needs. A final evaluation at the end of five years will mark the end of the training of trainers component of the National Lactation Management program.

## **7. SUSTAINABILITY OF THE PROGRAM**

Breastfeeding and lactation management will be integrated with other maternal and child health programs such as the Expanded Program of Immunization (EPI), control of diarrhoeal diseases, family planning, and growth monitoring. Managerial and administrative support will be provided on the same basis by Ministry of Health. Close networking with other departments and organizations carrying out child survival activities will be initiated and sustained to ensure continuity. Hopefully, with proper support and adequate nurturing, our National Centre for Information, Training and Research will grow beyond the confines of the Republic of Cameroon. Should this happen, the resultant need to maintain certain standards as host and model will further improve, strengthen and sustain national activities as part of routine care provision.

#### **IV. DETAILED IMPLEMENTATION OF TRAINING OF TRAINERS WORK PLAN**

##### **A. QUESTIONNAIRE FOR BASELINE DATA**

This will be designed to gather information on knowledge, attitudes, beliefs and practices related to breastfeeding and lactation management. The information will include factors influencing breastfeeding initiation and duration such as:

- Maternal motivation
- Postpartum procedures
- Intrapartum complications
- Post discharge problems
- Support systems at institutional and community level
- Prolactal feeding patterns
- Taboos
- Extent of exclusive, partial, token breastfeeding
- Supplementation
- Duration of breastfeeding
- Weaning
- Family planning
- Breastfeeding and pregnancy

Information will be obtained from:

- Mothers - antenatally, on discharge from maternity, at 3 and 6 months postnatally
- Health care providers for maternal and child health
- Community groups (men and women)
- Different questionnaires will be designed, pretested and precoded for each group

##### **B. ADAPTATION OF TRAINING CURRICULUM**

The Wellstart training program will be adapted to suit our context of work. The training will focus on reviewing scientific knowledge, improving clinical and training skills on breastfeeding and lactation management. This curriculum will include:

- Breastfeeding, child survival and growth monitoring
- Anatomy and physiology of milk production and secretion
- Biochemistry and immunology of human milk
- Common breastfeeding and lactational problems and their management
- Maternal and infant nutrition
- Weaning
- Drugs and lactation
- Contraindications and controversies on breastfeeding
- International code on the marketing of breastmilk substitutes
- Clinical experiences in hospital
- Low birth weight babies
- Sick babies, sick mothers
- Basics on research and follow-up methodologies
- Community information and education

### C. TRAINING AIDS

Teaching aids from Wellstart will be used for training at central and provincial levels. However, more teaching aids using local resources will be developed alongside program activities. Basic teaching aids will include:

- Slide projector
- Overhead projector
- Flip charts
- Hand outs
- Dolls for demonstration
- Food samples
- Blackboards

### D. TRAINING WORKSHOPS

All training workshops will be preceded by baseline data collection and analysis. At any one point, baseline data will be collected only from those areas where trainees have been invited. The efficacy of post training activities in these areas will then be evaluated in relation to the baseline data.

Training will be carried out in 3 stages with the aim of covering all ten provinces of the country by the end of the project.

Four participants selected from each province to constitute a multidisciplinary working team will be trained at central level over two weeks. They will be helped during their training to develop a strategy for training and supervising colleagues in the services where they work.

### E. FOLLOW-UP

Follow-up visits will be undertaken within two weeks, three months and six months of the graduation of the trainees.

The immediate post-training follow-up will take place within two weeks. It will be a combined administrative and supervisory visit. The aim of this visit is to sensitize the administrative boss of the trainee about the importance of the course undertaken by his staff. His support and collaboration will be solicited.

The first and second supervisory visits at 3 and 6 months post-training will aim at ensuring proper implementation of training objectives.

A refresher course involving the same trainers over one week will take place 9 months post-training. This will aim at updating trainers' knowledge and skills in order to prepare them to undertake training and supervision at divisional level.

### F. DIVISIONAL TOTS

These will take place simultaneously in the provinces immediately after the refresher course. Trainees at this level will consist of health care providers from divisional, sub-divisional and district levels. The training will be carried out by provincial trainers with the supervision of Wellstart graduates. Trainees at this level will be

expected to train colleagues and carry out promotive activities at their respective areas of work.

**G. EVALUATIONS**

Midterm evaluation of activities will take place between January and March each year approximately 16-18 months from the beginning of the project. The provinces will be evaluated in the order in which they participated in the central TOT. Final evaluation and the training of trainers project will be undertaken at the end of five years.

## BUDGET

<b>A. Collection of Baseline Data and Analysis</b>	Stationary <span style="float: right;">50,000</span> Transportation <span style="float: right;">200,000</span> Per diem 1 Supervisor <span style="float: right;">150,000</span> 2 Investigators <span style="float: right;">200,000</span> 1 Driver <span style="float: right;">50,000</span> Secretary <span style="float: right;">50,000</span> Statistician <span style="float: right;">200,000</span> <span style="float: right;">900,000</span> <span style="float: right;">X 10 = 9,000,000</span>
<b>B. Adaptation of Training Curriculum and Teaching Modules</b>	Per diem for selection committee <span style="float: right;">500,000</span> Stationary <span style="float: right;">50,000</span> Secretary <span style="float: right;">50,000</span> Duplicator <span style="float: right;">600,000</span> Electronic typing machine <span style="float: right;">250,000</span> <span style="float: right;">1,450,000</span>
<b>C. Training Aids</b>	Slide projector <span style="float: right;">300,000</span> Overhead projector <span style="float: right;">300,000</span> Flip charts <span style="float: right;">50,000</span> Video set <span style="float: right;">500,000</span> Hand-outs <span style="float: right;">100,000</span> Dolls for demonstration <span style="float: right;">50,000</span> Food samples <span style="float: right;">50,000</span> Blackboards, etc. <span style="float: right;">10,000</span> <span style="float: right;">1,360,000</span>

5/5

D. Training Workshop	Stationary	50,000	
	Transportation Trainees	2,000,000	
	Facilitators	3,000,000	
	Secretary	200,000	
	Snacks	100,000	
		5,350,000	
E. Follow-up	3 visits: transportation & per diem of Supervisors		
	Driver	800,000	
	Refresher course: transportation and per diems	50,000	
	Snacks	1,000,000	
		100,000	
		1,950,000	
F. Divisional Training of Trainers	1. Training modules	Stationary	100,000
		Per diem of selection committee	500,000
	2. Training aids	Flip charts	100,000
		Stationary	
	3. Training course	Transportation and per diem	
		-Trainees	1,000,000
		-Facilitators	1,500,000
	Snacks	300,000	
		3,500,000	

<b>BUDGET</b>		
<b>G. Evaluation</b>	Stationary	30,000
	Transportation	500,000
		530,000
<b>TOTAL FOR PROJECT</b>	A X 10	9,000,000
	B X 1	1,450,000
	C X 1	1,360,000
	D X 3	16,050,000
	E X 10	19,500,000
	F X 10	36,000,000
	G X 10	5,300,000
	Total for 5 years	88,660,000
	Maximum overhead of 10%	8,866,000
FCA	97,526,000	
	\$ = 300 FCA	
	\$324,400	

**BUDGET DISTRIBUTION**

- Research 15%
- Training 55%
- Supervision 20%
- Unforeseens 10%

## **JUSTIFICATION OF BUDGET**

- A. Collection of baseline data will be carried out by a team of 3 people in each province. This team will comprise a supervisor and 2 investigators. They will need some form of transportation. A statistician will be hired for data processing each time the need arises throughout the program.
- B. A multidisciplinary selection committee will meet in Yaounde over one week to draw up Training Modules using the Wellstart training program.
- C. Teaching aids will have to be purchased or produced from local resources.
- D. A team of 4 trainees from each province will be trained in Yaounde over two weeks on a rotational basis until all the provinces are covered.
- E. Follow-up visits will be done on the basis of two central or core trainers per province within 2 weeks, 3 and 6 months of graduation of the trainees. The refresher course at central level will involve the same number of trainees and trainers as the central TOT workshop, but they will last only one week.
- F. Divisional trainings will involve an average of 25-30 participants from divisional and district levels plus all provincial trainers and two core trainers to provide support.
- G. Evaluation teams will comprise at least four key participants: one core trainer, an external observer, a professional consultant, and a provincial trainer. The team will need transportation to get around and provision for lodging.
- H. Technical assistance will be mandatory at the beginning and end of the training component of the program and will be sought at key moments during its course as the need arises. Wellstart, USAID and WHO/UNICEF would be relied upon to provide such assistance hopefully in kind.

## REFERENCES

1. The State of the World's Children, 1991, United Nations Children's Fund (UNICEF), pages 1, 24.
2. Analyze de la situation des enfants et des femmes en Republique du Cameroon. Fonds des Nations Unies pour L'Enfance (UNICEF) Septembre 1989; Révision Juin 1990. Available from UNICEF field office Yaounde.
3. Cameroon en Chiffres (MINPAT, DSCN), Yaounde.
4. Resultat du Recensement Général de la Population et de L'habitat de 1976 (MINPAT, DSCN).
5. Enquête Nationale sur la Fécondité, 1978 (MINPAT, DSCN).
6. Alma ATA Declaration.
7. The State of the World's Children, 1990 and 1991.
8. Cameroon Demographic and Health Survey, 1991; Preliminary Report. National Department of the Second Population Census, Yaounde - IRD/MACRO International, Inc.
9. Eyong-Efobi, B.T.J., Water supplementation in exclusively breastfed infants aged 0-6 months in hot and arid areas: the case of Meri-Maroua in Cameroon. MD thesis, 1991, UCHS Yaounde.
10. Etude de la prise en charge des cas de diarrhée dans les formations sanitaires. Ministère de la Santé Publique, Programme National de lutte contre les maladies diarrhéiques, Yaounde, June 1991.
11. Etude de la prise en charge des cas de diarrhée dans les formations sanitaires de provinces du Littoral (Cameroon).
12. Etude de la prise en charge des cas de diarrhée dans les formations sanitaires des provinces Littoral et du sud au Cameroon.
13. Enquete sur la morbidité et la prise en charge des cas de diarrhée, Ministère de la Santé Publique/PRITECH, Novembre 1991.
14. National Nutrition Survey, 1978 (MINPLAN, DSCN) Yaounde.

**LACTATION EDUCATION AND  
BREASTFEEDING PROMOTION  
FOR  
CROSS RIVER STATE OF NIGERIA  
(A 3-YEAR PROGRAM PLAN)**

Dr. O.E. Antia-Obong

Ms. C.M. Ofere

Mrs. D. E. Etim-Okon

Presented March 13, 1992

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

**TOPIC:**

Lactation education and breastfeeding promotion program for Cross River State of Nigeria (a three year program plan).

**I. STATEMENT OF THE PROBLEM:**

Nigeria, many years ago, had infant feeding practices characterized by long duration of breastfeeding. The introduction of modern technology and the adoption of new life styles have eroded these breastfeeding practices. Consequently, the practice of bottle feeding has become widespread, especially with the female participation in the labour force and the migration of families from rural to urban areas. Rural to urban migration disrupts the extended family system, as a result young mothers are denied the support and guidance of their own mothers who are experienced in breastfeeding. This situation exposes these young mothers to the influence of their peers who may see bottle feeding as fashionable and breastfeeding as outdated.

Health institutions have also contributed largely to the decline in breastfeeding. Practices such as separation of newborn babies from their mothers, the use of prelacteal feeds and the liberal use of infant formula are commonplace in these facilities and discourage breastfeeding.

Of particular concern in Nigeria, is the fact that in spite of the adoption of the International Code for marketing breastmilk substitutes, which is aimed at encouraging and promoting breastfeeding as well as restructure the activities of infant food companies, the tenets of this code are not strictly adhered to.

In Nigeria, malnutrition is a major cause of childhood morbidity and mortality, which may be prevented to a large extent by increased breastfeeding.

**II. JUSTIFICATION:**

Considering the above scenario, it becomes pertinent to devise ways and means of improving and sustaining both the quality and duration of breastfeeding through increased advocacy, training and research so as to reduce malnutrition and its associated morbidity and mortality in the Cross River State of Nigeria.

**III. AIM:**

- A. To encourage the promotion and protection of breastfeeding through education of health care providers and mothers.
- B. To create awareness on the need to breastfeed exclusively for 4-6 months in the state.

**IV. OBJECTIVES:**

- A. By the end of the program at least 25% of health care providers (Doctors, Community Health Officers, Midwives/Nurses and Nutritionists) in the state will be able to demonstrate correct lactation management practices 50% of the time.

- B. By the end of the program, the percentage of mothers initiating breastfeeding within ½ an hour of delivery in health facilities in the state and breastfeeding exclusively for 4-6 months thereafter will increase by 70% and 40% respectively.
- C. By the end of the program, the percentage of mothers attending the antenatal clinics for the first time and maternal and child health clinics, who are aware of at least 2 advantages of breastfeeding and the duration of exclusive breastfeeding will increase by 40%.

## V. STRATEGIES AND ACTIVITIES

In the first month of this program, a committee to implement the program will be established. This committee will consist of the 3 Wellstart Alumni (Master Trainers) and 5 other persons who are interested in the promotion of lactation. A program office will be acquired as well as support staff such as a secretary, typist and driver. The members of this committee will meet with the State Ministry of Health officials to explain the need for lactation promotion and solicit their support by authorizing heads of health institutions to release staff for training.

A baseline study will be conducted in health facilities randomly selected from all local government areas of the state. These studies will include:

- A. Knowledge, attitude and practice of health care providers on breastfeeding.
- B. The percentage of mother in antenatal and postnatal clinics who were counseled on breastfeeding.
- C. The percentage of mothers who had breast examination during antenatal care.
- D. The percentage of mothers who breastfed within ½ hour of delivery.
- E. The percentage of infants who received prelacteal feeds.
- F. The percentage of mothers on discharge who exclusively breastfeed.
- G. On the spot examination of how mothers put babies to breast.

Resource persons will be invited during the second month, and they will work with the committee to produce a curriculum (curriculum workshop).

### Training

#### 1) Training of Trainers (TOT)

Trainers will be health professionals drawn from health facilities. They will have a course of instruction (6 hours daily for 7 days)

- Work Shop
- Seminars
- Discussions

- Demonstrations
- Film Shows
- Posters
- Role plays
- Clinical experience

Training will be held in a facility away from health institutions (conference room) and will start from Calabar. These trainers are expected to acquire a lot of skills, so training at this level is intensive with a lot of practical content. Skills that will be acquired include:

- Understanding the scientific basis of milk production
- Examination of the breast
- Management of:
  - inverted nipples
  - cracked nipples
  - engorged breast
- Manual expression of breastmilk
- Correct positioning of baby at the breast
- Nutritional requirements of mother and baby
- Correct weaning and weaning foods
- Initiation of breastfeeding
- Advantages of breastmilk and disadvantages of formula
- Breastfeeding under special conditions e.g., preterm babies and very ill mothers
- Understand the link between breastfeeding, growth monitoring, EPI, ORT and child survival

#### Supervision of TOT

This will be unscheduled and scheduled visits to their respective posts. Activities on such visits will include:

- a. The rate of initiation of breastfeeding.
- b. Interview of staff trained by the trainers.
- c. Observation of the skills of staff so trained.
- d. Percentage of staff who are trained.
- e. Percentage of mothers exclusively breastfeeding, and breastfeeding into the 2nd year of life.

#### 2) Market Women/Teachers/Other Women's Organizations/Men's Organizations/Churches

##### Teaching Method

Public lecture

Demonstrations

Outcome

Create awareness about the importance of exclusive breastfeeding, and the need to breastfeed into the 2nd year of life.

3) The General Public

Teaching Method

This is through newspaper advertisements, write-ups, radio jingles, television advertisement and new items. Schools debate on television.

Outcome

Awareness of the importance of exclusive breastfeeding for 4-6 months of life and the need to breastfeed into the 2nd year of life.

4) Policy Makers

Teaching Method

Lectures  
Discussions

Outcome

Awareness of the need to promote exclusive breastfeeding and the need to give backing to changes which will promote breastfeeding.

5) Traditional Birth Attendants (TBAs)

Teaching Method

Lecture  
Seminars  
Demonstration  
Role Play  
Clinical Experience  
Posters

Skill

Initiate breastfeeding within ½ hour of birth  
Correct inverted nipples  
Express breastmilk  
Improve care of the umbilical cord  
Correct positioning of baby at the breast  
Advocacy for exclusive breastfeeding and breastfeeding into the 2nd year of life

6) Activities in Health Centres

Besides supervising the trainers at these centres, the master trainers will use these visits to reinforce initiation, exclusive breastfeeding and other practices as routine breast examination. Staff who demonstrate the required skills will be commended while those yet to acquire same will be encouraged. Discussions will be held with staff to resolve difficult issues and make for better understanding and cooperation.

7) Activities in Local Government Areas (LGA)

These will include the sensitization of policy makers (LGA officials), traditional institutions (village heads), influential persons or groups (women leaders, market women, church organizations, father's clubs) and traditional birth attendants on the advantages of breastfeeding and the need to encourage early initiation and exclusive breastfeeding for 4-6 months, as well as breastfeeding into the 2nd year of life.

Training will be organized for health care providers (TOT). The Trainers will train other staff and village health workers. Visits by master trainers will serve to reinforce the program and heads of health facilities will be required to make quarterly reports of their activities, successes and failures to the committee.

Research

- a. Studies will be conducted into infant feeding and wean practices in the urban and rural areas of Cross River State.
- b. Cultural practices and beliefs in relation to breastfeeding.
- c. Food preference and aversion during pregnancy and lactation.
- d. Morbidity pattern in infants on exclusive breastfeeding.



## VI. WORK PLAN AND TIMELINE:

### WORK PLAN YEAR 1

<p>Phase I - Calabar Municipality</p> <ul style="list-style-type: none"><li>- Meeting/Planning by master trainers</li><li>- Meeting with authorities of target areas in the Municipality - i.e. Chairmen, Councillors for Health, Head of Health Facilities from where trainers will be recruited. Also, to get the baseline data on the % of mothers initiating breastfeeding within ½ hour of delivery, exclusive breastfeeding by 6 weeks, and total duration of breastfeeding. Research.</li><li>- Training of trainers (i.e. health workers X 7 days)</li><li>- Supervision of health workers by master trainers</li><li>- Media Communication<ul style="list-style-type: none"><li>- Radio</li><li>- TV</li><li>- Newspaper</li><li>- Mass mobilizations for social and economic recovery (MAMSER)</li><li>- Better life for rural women</li></ul></li><li>- Market women (since they can be used as agents of social change)</li><li>- Teachers in primary/secondary school</li><li>- School children's debate</li><li>- Churches - women and church leaders will be used as agents of social change</li></ul>
<p>Phase II - Activities in Health Centres</p> <p>Visit of master trainers to Health Centres for Health Education and continuous supervision.</p>
<p>Phase III - Activities at Local Government Areas (Odukpani/Akpabuyo)</p> <ul style="list-style-type: none"><li>- Visit to opinion leaders, e.g.:<ul style="list-style-type: none"><li>- Village heads</li><li>- L.G.A. officials</li><li>- Influential people                      Village heads</li><li>- Women leaders</li><li>- Traditional birth attendants</li><li>- Market women</li><li>- Fathers clubs</li><li>- Church leaders</li></ul></li></ul>

### WORK PLAN YEAR II

<p>Phase IV - Activities extend to 3 more local government areas - Akampa, Obubra and Ikom</p>
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## WORK PLAN YEAR III

Phase V activities extend to 3 more L.G.A.; Ogoja, Obudu, Boki.

### VII. ORGANIZATION AND STAFFING

#### A. Roles of organizations

##### 1) University of CTH

The University of Calabar Teaching Hospital is already involved in breastfeeding promotion, so it will provide resource persons for the training sessions.

##### 2) Ministry of Health/Health Centres/Hospitals

The Ministry of Health is charged with health matters in the state. Its role will be that of giving official backing to the programme, thus empowering staff of its health facilities to attend training sessions.

The Health Centres are in the front line of primary health care. The role of these centres is to provide staff for training courses. The same also will apply to other hospitals in the state.

##### 3) Local Government Councils

These councils are charged with the provision of primary health care in their individual areas. Their involvement will encourage staff in their health institution to attend and implement breastfeeding policies.

#### B. Staffing

Dr. O.E. Antia-Obong	Master Trainer (Wellstart Alumni)
Ms. C.M. Ofere	Master Trainer (Wellstart Alumni)
Mrs. D.E. Etim-Okon	Master Trainer (Wellstart Alumni)
Mrs. M.U. Young	
Dr. E.E. Ekanem	
Ms. M. Okon	
Secretary	
Clerk	
Driver	
Ms. F. Ise	

## VIII. MONITORING AND EVALUATION:

### A. Baseline Data

- 1) KAP study on breastfeeding among health care providers.
- 2) Survey of mothers in antenatal and postnatal clinics who have had counseling on breastfeeding; breast examined during antenatal care; % who initiated breastfeeding within ½ hour of delivery; % of infants who receive pre-lacteal foods; % of mothers on discharge who exclusively breastfeed; spot visit to examine how mothers put babies to breast.

### B. Subsequent Data

Repeat of same parameters as in Baseline at intervals of one year and at end of program. % of babies breastfed exclusively at 4-6 months; % of babies who continue to breastfeed at various ages before 2 years.

**TIME LINE YEAR 1**

ACTIVITIES	MONTHS											
	1	2	3	4	5	6	7	8	9	10	11	12
Establish committee, acquire office and furniture, appoint support staff	■■■■■■■■■■											
Meet ministry of health officials and heads of health facilities	■■■■■■											
Conduct baseline studies and research		■■■■■■■■■■	■■■■■■■■■■									
Select and invite research staff		■■■■■■										
Curriculum workshop			■■■■■■■■■■									
Select and invite trainers			■■■■■■									
Training of trainers (TOT) courses				■■■■	■■■■	■■■■	■■■■					
<b>PUBLICITY</b> Meeting with mass media executives and mamser			■■■■■■■■■■	■■■■■■■■■■	■■■■■■■■■■	■■■■■■■■■■	■■■■■■■■■■	■■■■■■■■■■	■■■■■■■■■■	■■■■■■■■■■	■■■■■■■■■■	■■■■■■■■■■
Meeting with traditional rulers council			■■■■■■									
Meeting with market women, church and mens' associations and teachers					■■	■■	■■	■■	■■	■■	■■	■■
<b>SUPERVISION</b> (monitoring) supervision of activities in health facilities by committee members						■■	■■	■■	■■	■■	■■	■■
Evaluation												■■■■■■■■■■

191

**TIME LINE YEARS 2 & 3**

ACTIVITIES	MONTHS											
	1	2	3	4	5	6	7	8	9	10	11	12
Committee meets, plans for the year	█											
Meeting with local government officials, heads of health institutions, selection of trainers		█										
Training of trainers (TOT)			█	█	█	█						
Publicity on radio/television/newspapers/posters	█	█	█	█	█	█	█	█	█	█	█	█
Outreach to village heads/women's associations/village health workers/TBAs/Church organizations			█	█	█	█	█	█				
Supervision of health facilities activities (monitoring)								█	█	█	█	
Evaluation												█

100

**BUDGET IN U.S. DOLLARS**

**Year I: Calabar Municipality**

<b>STRATEGIES/ACTIVITIES</b>	
<b>SETUP AND RELATED ACTIVITIES</b>	
Meeting of 3 Master Trainers at \$10 each	\$ 30.00
Meeting of 10 staff at \$10 each	100.00
Meeting with authorities of Target Areas in the Municipality (including all protocols) x 20 places	400.00
Collection of baseline data	1,000.00
<b>Subtotal</b>	<b>1,530.00</b>
<b>TRAINING OF TRAINERS</b>	
20 resource personnel at \$30 per day	600.00
Hiring the hall at \$20 per day x 7	140.00
200 participants' per diem at \$10 per day x 7 days	14,000.00
Resource materials for 200 participants	10,000.00
Snacks/entertainment	2,850.00
<b>Subtotal</b>	<b>27,590.00</b>
<b>SUPERVISION OF HEALTH WORKERS BY MASTER TRAINERS (Transportation)</b>	
Training, supervision, miscellaneous	12,000.00
<b>Subtotal</b>	<b>12,000.00</b>
<b>MASS COMMUNICATION</b>	
Radio	15,000.00
TV	20,000.00
Newspaper	12,000.00
<b>Subtotal</b>	<b>47,000.00</b>
<b>TARGET GROUP EDUCATION</b>	
1 day workshop for Women in Better Life for Rural Women & Women Commission (Ralley)	600.00
1 day workshop for teachers in primary and secondary schools	600.00
School children's debate	600.00
Churches	600.00
<b>Subtotal</b>	<b>2,400.00</b>

61

<b>STRATEGIES/ACTIVITIES</b>	
<b>ACTIVITIES AT LOCAL GOVERNMENT AREAS (Odukpani &amp; Akpabuyo)</b>	
5 courtesy calls	1,000.00
5 one day workshops	3,000.00
<b>Subtotal</b>	<b>4,000.00</b>
<b>Subtotal — end of Year One</b>	<b>94,520.00</b>
<b>TOTAL STRATEGIES/ACTIVITIES (: 3 YEARS)</b>	<b>283,560.00</b>

<b>EDUCATIONAL EQUIPMENT</b>	
2 slide projectors	\$ 400.00
2 overhead projectors	800.00
10 boxes transparencies	200.00
1 video machine	400.00
10 video cassettes	200.00
3 cameras	300.00
5 slide trays	100.00
2 cassette recorders/players	300.00
2 flip chart boards	100.00
20 rolls photographic film	100.00
5 hanging scales	800.00
2 baby scales	400.00
Miscellaneous (paper, envelopes, folders, markers, staplers, punchers, binders, staples, clips, pads, labels, etc.)	1,000.00
<b>TOTAL EDUCATIONAL EQUIPMENT (3 YEARS)</b>	<b>\$ 5,100.00</b>

<b>PERSONNEL &amp; ADMINISTRATIVE EXPENSES</b>	<b>Per year</b>
Master Trainers (3 persons x \$500.00 monthly)	18,000.00
Other Staff (3 persons x \$250.00 monthly)	9,000.00
Secretary (1 person x \$150 monthly)	1,800.00
Clerk (1 person x \$150.00 monthly)	1,800.00
Office Cleaner (1 person x \$100.00 monthly)	1,200.00
<b>Subtotal — end of Year One</b>	<b>31,800.00</b>
<b>TOTAL PERSONNEL &amp; ADMINISTRATIVE EXPENSES (: 3 YEARS)</b>	<b>95,400.00</b>

162

<b>GRAND TOTAL, THREE YEARS</b>	
Strategies/Activities	\$ 283,560.00
Educational Equipment	5,100.00
Personnel & Administrative Expenses	95,400.00
<b>GRAND TOTAL</b>	<b>384,060.00</b>

**APPENDIX**

## **LEARNING OBJECTIVES:**

At the end of the course, the participants will be able to:

1. Describe the changes in the breast that lead to milk production.
2. List 8 advantages of breastfeeding.
3. Counsel mothers on the initiation and maintenance of exclusive breastfeeding and the need to breastfeed into the 2nd year of life.
4. Give nutritional advice to expectant and lactating mothers.
5. Demonstrate the reverse cradle hold and football hold methods of breastfeeding.
6. Describe the prenatal and postnatal care of the breast.
7. List at least 6 problems associated with breastfeeding and their prevention/treatment.
8. List cultural beliefs and practices that impede successful breastfeeding.
9. Advise mothers on the weaning process and diet using locally available foods.
10. List 8 out of the 10 steps to successful breastfeeding.
11. Discuss or describe of the link between breastfeeding and other child survival strategies such as EPI, ORT, and growth monitoring.

# TRAINING OF TRAINERS COURSE

## I. TRAINING CONTENT:

### OUTLINE OF COURSE CONTENT

#### Anatomy and physiology of the breast

##### Anatomy

- Gross anatomy
  - Size and shape (variations)
  - Nipple
  - Areola & Montgomery gland
  - Internal structure
    - The alveoli
    - The lactiferous ducts

##### Mamogenesis

- Changes in the breast during pregnancy due to effect of hormones (e.g., progesterone & estrogen)
- Compare the non-pregnant to the pregnant breast

##### Physiology of lactation

Facts about the production of prolactin from anterior pituitary  
The role of the reduction of progesterone in the production of prolactin  
Effect of prolactin on the alveoli  
Changes in the alveoli as milk is produced  
The influence of suckling on lactation

##### Milk ejection reflex

Release of oxytocin  
Effect of oxytocin on myoepithelial cells  
Milk ejection

##### Natal

Care of the mother during labour

- Reduce sedation

##### Post Natal

- Initiation of breastfeeding within ½ hour of delivery
- Correct attachment (latching)
- Correct position for mother and baby
- Duration of feeding on each breast (10-15 minutes)
- Evidence of satisfactory nursing: (a) swallow; (b) weight gain (regain birth weight in 10 days and thereafter gain 15-30 gm/day).
- Rooming-in
- Manual expression of breastmilk for (a) engorged breast; (b) slow nursers

- Maternal nutrition during lactation
- Weaning diet

Management of common problems associated with breastfeeding

- Cracked nipples
- Mastitis
- Candidiasis of the nipple
- Breast abscess
- Blocked duct

Linkages

Growth monitoring

ORT

ARI

Family planning

Immunizations

- Show the association of breastfeeding with all mentioned above