

PN-ABN-212
ISA 80706

**DTU TRAINING
ZAMBIA**

**A Report Prepared by PRITECH Subcontractor:
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**During The Period:
OCTOBER 19-28, 1990**

TECHNOLOGIES FOR PRIMARY HEALTH CARE (PRITECH) PROJECT

Supported By The:

**U.S. Agency for International Development
CONTRACT NO: AID/DPE-5969-Z-00-7064-00
PROJECT NO: 936-5969**

**AUTHORIZATION:
AID/S&T/HEA: 01/02/91
ASSGN NO: SUP 137-ZA**

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TRIP REPORT

ZAMBIA

Introduction

In accordance with Purpose and Scope of Work dated September 19, 1990, I proceeded to Lusaka, Zambia, in order to visit the newly established Diarrhea Training Unit (DTU) from October 19-28, 1990, to undertake the following activities:

1. Assist the Zambian DTU trainers in curriculum development and training for the fourth national case management training course scheduled from October 22-27, 1990, by providing:
 - methods to increase participatory activities in the training course;
 - practical ways to incorporate the growth monitoring cards routinely used in Zambia into the case management and health education efforts;
 - activities to increase the emphasis on communication skills in addition to case management skills in the clinical practicum and lecture portions of the course; and
 - finally, assistance in the development of supervisory checklists to be used by participants upon return to their home facilities.
2. Investigate the need for breast-feeding promotion activities at the University Training Hospital (UTH), Lusaka and urban health centers; discuss the possibility of establishing a Lactation Management Training Center (LMTC) at UTH to respond to this need.

Rationale for DTU Training in Zambia

A health facility survey carried out in Zambia in early 1990 underlined the need to improve case management skills among health workers at provincial and district levels. The study showed that while health workers could assign the correct WHO treatment plan to the presenting child depending on his hydration status, the patient was seldom weighed or assessed for growth status. Also there was no consistent demonstration of proper ORS mixing and administration given to the mothers. And overuse of antibiotics and unnecessary antidiarrheals was common.

The current plan of action for the national CDD program calls for the establishment of over 600 new ORT corners located in rural health units and hospitals throughout Zambia. A prerequisite to setting up these corners will be the training of competent staff to provide appropriate diarrheal case management. To achieve this, middle and upper-level clinical staff would undergo a five-day course at the national DTU located on the UTH compound; the participants then would return home where they pass on their newly acquired skills to those health workers responsible for direct patient contact.

Current Status of DTU/CDD Activities in Zambia

Already the DTU has graduated three classes and the faculty has gained considerable expertise in developing an appropriate curriculum despite the fact that they have had no formal "training of trainers" (TOT) course to date. Dr. Hans Troedsson, the newly appointed WHO/APO for CDD in Zambia, has provided considerable support to the DTU faculty in their training efforts.

The DTU, officially inaugurated on October 28, 1990, is an ample facility physically separated from the major hospital complex but nevertheless located within a short distance from the Pediatric Filter Clinic from where all diarrhea cases should be referred to the DTU for appropriate treatment. But currently some diarrheal cases are referred directly from the Filter Clinic to the Pharmacy for ORS without receiving appropriate patient education on correct mixing of the solution or instruction on when to return if the child does not improve.

Furthermore, observation of diarrheal case management on the in-patient wards revealed plastic buckets filled with ORS positioned on each pediatric hospital ward; mothers dip into this communal source often giving the ORS in a nursing bottle with no supervision as to quantity. In fact, often mothers mistakenly identified the fluid to be "glucose" and were unaware of the advantages of ORS. They were not advised about continuing feeding during diarrhea, the importance of breast-feeding, and when to bring the child back to the clinic.

The DTU staff is well aware of these deficiencies on the wards and in the Filter Clinic; therefore, several participants in the fourth course included key personnel from those hospital units needing improved case management. The final plans of action presented at the end of the course by the respective participants provided well-developed solutions to the gaps in training and supervision needed to upgrade the current clinical situation. These recommendations are reflected in the admitting and discharge policy recently drafted by the Department of Pediatrics and Child Health shown in Attachment I.

Currently in the DTU itself, a well-trained nursing staff is responsible for the day-to-day operations including demonstration of ORS preparation for mothers as well as careful monitoring of the progress of patients as they undergo rehydration. Also all patients are fed a nutritious porridge thus incorporating feeding into routine case management therapy. The DTU operates 24 hours a day. But there is a staffing shortage of nurses particularly during the peak diarrheal season which runs from November through February annually. Neither is there a full-time physician assigned to the DTU who is responsible for training and routine DTU clinical management. As the utilization of the DTU and its training functions expand, it will be critical to address these personnel deficiencies.

The Fourth National Case Management Course in Zambia

A. Objectives

One day prior to the start of the training, I met with Dr. Bhat, the UTH Professor of Pediatrics supervising the DTU, Dr. Troedsson and Dr. Paul Freund, the CDD PRITECH Field Representative in Zambia, to discuss the objectives for the upcoming training course. Dr. Bhat identified the objectives of the course as follows:

1. To instruct participants in appropriate case management of acute watery diarrhea together with how to advise mothers on household management of future episodes.
2. To monitor the growth status of the patient and identify those factors which may be contributing to faltering and to use the diarrheal episode as an opportunity to communicate nutrition education messages to the mother.
3. To use the DTU visit as an opportunity for an EPI check and to vaccinate those with immunization delinquencies, especially measles, before leaving the Unit.
4. To advise on family planning in order to insure proper child spacing.
5. To train the participants in methods of diarrhea prevention at the community level.
6. Finally, to instruct the participants in setting up and managing a ORT corner.

But the course appeared to lack instruction and training in the following two objectives which are directly related to the participants' functioning in the field:

1. To train the participants in effective methods for training their health workers on return to their home facility.
2. To provide specific instruction and methodologies for supervision of health workers in order to assure quality of case management and continuity of competent performance.

During the initial planning session with Dr. Bhat and the DTU faculty, there was consensus that the latter two objectives should to be addressed as well in the upcoming course. It was further agreed that the course would start off by involving the trainees in an exercise to articulate the objectives for the course. Also there would be a heavy emphasis on the practicum portion of case management with didactic lectures following the hands-on experience. In addition, it was agreed that the child health cards which are brought in by practically every mother who attends the DTU would become an integral part of patient evaluation and treatment. At the same time, the comprehensive and detailed clinical instruction in diarrheal case management as outlined by WHO in their DTU Director's Guide would remain the essential focus of the course.

B. Organization

The twelve trainees who assembled on the opening day of the course were a combination of public health nurses, clinical and hospital nurses, clinical medical officers and post-graduate physicians. They represented several units at UTH as well as some district hospitals. Also there was a physician who headed up a large primary health care demonstration project for the Ministry of Health. The Dean of UTH, Dr. Mukelabai, addressed the group in the opening session and emphasized the importance of the course training in improving child survival efforts for Zambia. He has been a strong supporter of the DTU concept and endorsed the new, expanded objectives for the case management training.

Following the agenda agreed upon beforehand, the exercise for the initial session enlisted the participants in identifying all the objectives to be accomplished by the course including those

involving supervision and improved communication skills. It was only after quizzing them about their actual roles back at their home facilities that they shifted the focus for the objectives away from acquiring necessary clinical knowledge of case management for themselves to including the transfer of this information to their staff and finally, from the staff to the care providers of the children coming to their clinics. It was agreed that the ultimate outcome of quality case management would result in mothers being able to recognize and treat early a bout of diarrhea at home, to know when to seek outside health care assistance and how to prevent future diarrhea episodes.

After the pretest and a brief introduction to the patient assessment form routinely used in the DTU, the participants immediately proceeded to the ward to manage their first assigned patients. As might be expected, the initial assessment skills of the participants were deficient; many of them overestimated the degree of dehydration and would have started intravenous fluids had not the facilitators carefully guided them through the management of their initial cases. It was after this first practical session that the didactic lecture on case assessment and treatment followed. This sequencing of training methods proved to be quite successful resulting in lively discussion in the lecture session and in retrospect, was approved by the trainees in their final evaluation.

To successfully carry out this learning approach, the course must enlist the cooperation of several skilled facilitators using a low facilitator:trainee ratio. This investment in the "quality" of the training can be justified when one considers the number of health workers to benefit from the follow-on training to be provided by the participant. For this course, the participants were divided into groups of three with a facilitator assigned to each group daily on a rotating basis. Routinely the participants met with their facilitators each afternoon for review of cases worked up on the Unit in the morning. These sessions were made more participatory by involving each member of the group during the recitations. One member served as "supervisor" of the "health worker" who presented the case, while the third team member observed the interaction between the "supervisor" and the "health worker" for proficiency in case management as well as communication skills. This role-play was introduced on the third day only after the trainees had become comfortable with their clinical skills and didactic instruction in communication and supervision skills had been presented in class as well as repeatedly modeled by the facilitators during the first two days.

C. Course Content

As a starting point for clinical instruction, the faculty relied heavily on the WHO lecture outlines contained in the manual for DTU directors. The slides and lecture material proved useful in covering topics such as the etiology and pathophysiology of diarrhea and the assessment and treatment of dehydration. But the manual lacks a module dealing with integration of growth monitoring into case management as well as specifics on use of home available fluids and the role of breast-feeding in diarrhea prevention and treatment. These topics were included by the faculty during the course despite limitations in their own knowledge in some of these areas. For example, the Zambian growth monitoring cards lack clear instruction in how to interpret them to assess the degree of a child's growth retardation; there is little available qualitative or quantitative information on the use of home fluids in diarrhea episodes in Zambia. The faculty is aware of these gaps and steps are underway to clarify these important points for future training sessions.

The incorporation of training in communication skills into the course presented a real challenge to the instructors. Being clinicians themselves, they experienced little difficulty in presenting medical

information to the trainees despite their own lack of a TOT course. But the area of communication skills was foreign to them although in principle they accepted it as important for health workers to do well. The manual, "Talking with Mothers," proved to be helpful in clarifying this module both for the facilitators and trainees as well. We found it essential that the role-play exercise contained in the manual be "reenacted" at each case presentation as well in order that the trainees gain a degree of proficiency in their own communication skills as well as in the training and supervision of these skills in their staff. Although this was practiced for the last three days, at the termination of the course both the DTU faculty and the trainees expressed need for further training in this area.

On day four I presented a talk dealing with the rationale for communicating effectively both with health workers as well as with mothers in order to promote positive behavior changes. Up to this point, the "communications" portion of the training dealt with the practice of skills contained in the summary of the "Talking with Mothers" manual shown in Attachment II. Now a more theoretical approach to behavioral analysis steps useful in defining interventions to improve and maintain beneficial behavior changes in mothers as well as health workers was covered. The content of this talk incorporated many ideas shared with me by Dr. Judy Graeff, a behavioral specialist with the HEALTHCOM project. This lecture expanded the notion of communication considerably beyond the "one on one" encounter with mothers and served to introduce concepts that must be followed up in a subsequent training session in supervisory skills involving the same course participants. It is suggested that the follow-on training take place about four to six weeks after the case management training. Also this would be an opportunity to give a progress report to the CDD Secretariat on start-up activities as a result of the first course and to present specific data necessary for the discussion of the CDD operations in their respective facilities. An outline of this talk is shown in Attachment III.

As indicated in the talk, one of the suggested interventions to help supervise the performance (behavior) of health workers is the use of checklists which can be employed while observing them function in their jobs. Also the same checklists can be provided to the workers themselves to be used as self-monitoring devices. As a final homework assignment, the trainees modified sample checklists for clinical and communication skills which they would take back with them, thus "owning" them for on-the-job use in the future. These checklists are shown in Attachments IV and V.

As a special lecture on day four, Sister Monzi, the DTU Head Nurse, discussed the diagnosis and clinical case management of cholera based on the outbreak experienced in Lusaka in early 1990. She was the first to diagnose a case in a young woman who had presented to the DTU. In all, Lusaka experienced 107 cases with four deaths for a case fatality rate of 3.7. An expected recurrence has already surfaced this month; therefore, training in early diagnosis and treatment of cholera will be included in all DTU training courses.

As the course progressed, the participants showed increasing proficiency and confidence in their ability to correctly manage cases. On day four, they contributed to a brief epidemiologic exercise involving all the cases handled by them up to that time. In addition to compiling data, the objective was to sensitize the participants in the need for data collection and analysis not only in their own facilities but at district, provincial and national levels as well. The exercise produced the following findings in the 50 cases studied:

<u>Age</u>		<u>Sex</u>	
0-6 months	16%	male	70%
7-12 months	36%	female	30%
13-24 months	44%		
25+ months	4%		
		<u>Cases complicated with other diseases</u> <u>(malaria, sepsis, pneumonia)</u>	
<u>Degree of dehydration</u>		yes	46%
none	26%	no	54%
mild/moderate	74%		
severe	0%		
		<u>Outcomes</u>	
<u>Growth status</u>		sent home after ORS	50%
normal	29%	admitted to DTU wards	10%
mod retarded	44%	transferred to ICU	18%
severely retarded	27%	absconded	2%
		died	6% (CFR)

While the data themselves proved interesting, the real point of the exercise went beyond the numbers. Several times the group had to recount the cases assigned to the categories of growth retardation for example, thus underscoring the need for precision in definition of terms, the correct assignment of cases to their categories and accuracy in simple arithmetic.

As the final course activity each individual presented their plan of action focusing on those particular activities they hoped to accomplish over the next three months. Using a common format provided for this planning activity, all of the candidates presented excellent practical steps to establishing ORT corners as well as for providing training and supervision to those who work in their facilities. These written plans were then submitted to the National CDD program manager and the Secretariat for logistical support.

One of the participants noted that already three health professionals from his hospital had been trained at previous DTU courses and as yet, no ORT corner had been established in their facility. This led to a discussion with members from the CDD Secretariat on administrative constraints and logistical problems in the provision of ORT corner equipment. As a result of the discussion, the DTU faculty recognized they must follow-up all graduated participants with supervisory visits in order to identify the reasons for delays in implementing the respective activity plans.

At the termination of the training, the DTU faculty and I reviewed the evaluation comments and identified strengths and weaknesses in the training just completed. Attachment VI contains a summary of my recommendations presented to Dr. Bhat. Finally, the DTU faculty hoped to incorporate many of these lessons learned from the national course into the upcoming WHO Regional course scheduled for November, 1990.

D. Follow-On PRITECH Activities

Encouraged by the outcome of this course, I consulted again with Dr. Graeff on return to PRITECH/Washington in order to refine further this training approach. She pointed out the need to link the efforts in case management training to include supervisory skills training as well; to

expand the content of the case management training any further would be overly ambitious. This sequencing of the training reinforces concepts introduced in the first course and ensures that the clinical training objectives are not diluted. Likewise, the training in essential management and supervision skills is not neglected.

Furthermore, I contacted Dr. David Nicholas, director of the Quality Assurance project for possible collaboration in the area of evaluation. He will assist in design and implementing of competency-based performance evaluation for the health workers after training. This new project is an outgrowth of the experience gained from the PRICOR II project.

The first joint meeting of representatives from PRITECH, HEALTHCOM and the Quality Assurance projects took place on November 20, 1990. The objective was to explore the possibility of combining the particular areas of expertise and resources of the three projects to improve health worker training in case management and supervisory skills. The minutes of the meeting are shown in Attachment VII.

Finally, I shared the results of the Zambian course and PRITECH's interest in collaboration with the other two projects with Dr. Mariam Claeson of WHO/Geneva during her recent visit here. She supported the idea and PRITECH will keep her advised on all the developments of this effort including training materials as they are developed.

2. Breast-Feeding Operational Research and Wellstart Training

In order to collect baseline data related to infant breast-feeding practices in Zambia, it was agreed with Dr. Paul Freund, Dr. Mukelabai and Dr. Mary Ngoma, Director of the Perinatal Unit at UTH, that a KAP survey would be carried out interviewing post-partum mothers and health workers at the UTH. Draft questionnaires for the study shown in Attachment VIII were prepared prior to the field visit with input from Dr. Sandra Huffman, director of the Center to Prevent Childhood Malnutrition. In addition, Dr. Mukelabai was supportive of designating a five-member UTH team involving members from the Departments of Obstetrics, Pediatrics, Nursing and the CDD program as candidates for Wellstart project training in early 1991. Subsequently, this team would be responsible for establishing a Lactation Management Training Center (LMTC) at the hospital which in turn would serve as a resource for training staff in other Zambian hospitals. The KAP survey will provide a baseline evaluation for possible changes brought about by the future LMTC.

Finally, additional breast-feeding KAP questionnaires would also be administered to health workers and mothers attending the DTU and two urban health clinics in Lusaka. These draft questionnaires are shown in Attachment IX. The results of this survey can be compared with those collected in the hospital setting. These studies will be executed by Dr. Freund with support from the RAD budget of PRITECH; the results should be available in early 1991.

DEPARTMENT OF PAEDIATRICS & CHILD HEALTHADMITTING AND DISCHARGING CRITERIA FOR A06 (DTU)

1. ADMISSION: When admitting a child to A06, the following points will be followed:-
 - Any child with Acute Diarrhoeal Disorder for the sake of Rehydration from A01.
 - Any child who develops Acute Diarrhoeal Disorder whilst an in-patient of any of the Paediatric wards, may be transferred to the Centre (A06) after having been reviewed by a Senior Medical Officer (Senior Registrar/Consultant) of his/her ward.
 - No transfer of Patients from in wards after 16 hours, during Public Holidays and weekends.
 - Once rehydration has been done, the patient will be transferred back to his ward.

2. DISCHARGE: Patients may be discharged home or to other wards after fulfilling the following:-
 - (1) Complete Rehydration.
 - (2) The patient should be going towards positive balance.
 - (3) They should be able to take orally.
 - (4) The Mother should:-
 - (a) Know how to prepare and administer ORS
 - (b) Know correct feeding practices
 - (c) Know how to prevent any further attacks of Diarrhoea.
 - (5) The Under-Five Card should be checked for any missed Immunizations and these missed Immunizations should be given in the ward when available.
 - (6) Any child found with any associated systemic problems after all the above has been done, will be referred to the Admitting Unit for further management.
 - (7) Review for straight forward cases of Acute Diarrhoea will be done after 24 hours of discharge in the Unit. All malnourished cases will be referred to the Nutrition Clinic for follow up care.

Summary from "Talking With Mothers'" Manual

Use A Mother's Pamphlet

- To remind you and your staff of the important points
- To give the mother instructions to use at home if she forgets or feels unsure

Give Support

If the mother feels positive about what she can do to care for her child, she is more likely to carry out your instructions.

- Discuss the mother's situation. If she lacks something that you have recommended explain how to obtain it or recommend a substitute.
- Compliment the mother on things she did at home that were good for her child.
- Show the mother positive consequences of an action or treatment that will outweigh the negative ones.
- Ask checking questions that the mother can answer correctly, and then praise her.
- Have the mother practice a task with guidance so that she will do it correctly, and tell her that she is doing well.

Ask Checking Questions

A checking question asks for more complete information about something mother has said, or it can determine what a mother has learned. Ask checking questions to:

- do a better assessment of your patient
- be sure the mother understands how to care for her child at home
- monitor your staff's communications with the mother

Use Examples

Examples will make your instructions to the mother more interesting and effective

- Show pictures
- Name a specific instead of giving only a general rule
- Do a demonstration
- Show an object
- Tell a story
- Have the mother practice certain tasks herself

COMMUNICATION SKILLS
Do we need them? Why?

In order to teach, train, motivate

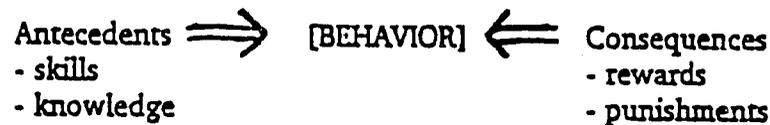


Change behavior
Public health professionals are in the BEHAVIOR business

Behavioral principles

Expounded by B.E. Skinner, rewards can change behavior.
Three major principles relevant to health communications:

1. the existence of inner states (motivation, attitudes) can only be inferred from observing behavior.
2. behavior is learned, and
3. the environment is largely responsible for shaping and maintaining behavior.



Consequences are FAR MORE powerful in influencing and maintaining behavior. Training, however, functions largely as an antecedent.

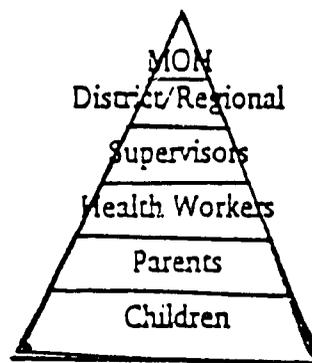
Therefore, if you can change the environment, you can change people's behavior.

QUESTION: How to change the consequences of behavior in public health program?

Strategy I

Target the layer of people above the one whose behavior is of interest.

In the Health System scheme, this order prevails:



Use a 2-pronged attack to:

- lower the negative consequences and
- raise the positive consequences.

But unfortunately, many public health practices (example, growth monitoring, ORS etc.) do not have immediate positive results themselves. Therefore, until the long-term benefits become apparent to parents something else must be supporting their positive behavior.

Example, encouragement, interest from health worker as outlined in summary from: Talking with Mothers.

Up to now, we have been discussing the interaction between the mother and the health-worker. At this point let us consider a similar approach to impacting on the "consequences" that might influence the interaction between the health-worker and the supervisor.

Suggested training modules for Supervisors of HW's.

Module I

- a) Supervisors must think through in detail what running a ORT Corner on a daily basis means for the HW. What is each task; how frequently must it be done; equipment needs etc.
- b) Where there are deficiencies (problems) identified, are they due to skills issues vs performance issues?
- c) Training improvements address skills issues; consequences address performance issues. Example, for health education lecture, what can be done to reduce negative factors such as location, staffing needs, clinic procedures, policies? What can be done to increase positive results? For example, supervisors seek feedback from HW; HWS need to know when they are doing something right.

Module II

- a) Behavior or analysis of each major task of HW:
 - Case Management > step by step behaviors.
 - Communication with mothers > specific behaviors for effective communication
 - Content of messages.
- b) Devise checklist for observation/self monitoring/training design/evaluation of Case Management and Communication skills.
 [Review examples designed by trainees for checking Case Management and Communication skills respectively; these are to be tested and revised]
- c) Using the checklists, learn how to give feedback. The purpose of feedback is to encourage HW's to do things right. Elements of constructive feedback include:
 1. Have HW indicate what they did well and what they need to improve.
 2. Outline what the HW did well - cite behaviors observed.
 3. Outline what HW can do differently next time. Let them practice.

Module III: Behavior Maintenance Plan

- a) Supervisors draw up maintenance plan taking into account the following critical elements:
1. necessary policy, procedure, staffing changes
 2. additional training needs in:
 - Case Management skills
 - Communication skills
 - ORT Corner management skills.
- b) Feedback loops: - return performance indicators back to HW. Make it visible and non-threatening through:
- use of checklists
 - meetings
 - newsletter
 - awards etc.
- c) Finally what can the CDD program do to support the Supervisors themselves to maintain their own work performance? This is the next level up on the pyramid.
- Similar procedures described for HW's apply here as well.

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12'

CASE MANAGEMENT SKILLS CHECKLIST
FOR SUPERVISING HEALTH WORKERS

NAME OF PARTICIPANT: _____
NAME OF HEALTH FACILITY: _____
NAME OF TRAINER/OBSERVER: _____
DATE: _____

This skills Checklist has 2 purpose:

1. Participants should use it as a guide for checking their own skills or other participants' skills.
2. Trainers should use it when they evaluate how well students perform the basic and additional skills.

After observing the participant performing these skills, enter a rating and comments in the appropriate columns.

Rating: 1 = Inadequate
2 = Needs Improvement
3 = Adequate

BASIC SKILLS CHECKLIST FOR SUPERVISORS

To manage all diarrhoea cases that come to your health facility use your Case Management Sheet reference and follow these steps or teach health staff to follow these steps:

STEPS:	YES	NO	RATING	COMMENTS:
1. Set up an ORT table with: (or teach a health worker how to).				
1.1 ORS Packets				
1.3 Litre container with lid.				
1.4 Stirring spoon, a wash basin.				
1.5 Cups and spoons.				
1.6 A selection of containers from the local market with volumes written on them.				
2. ASSESS A DIARRHOEA CASE USING THE CLINICAL FORM				
2.1 Determine history of present diarrhoea episode.				
2.2 Determine diet prior to and during diarrhoea.				
2.3 Weigh the child and assess immunization status.				
2.4 Assess hydration status using Assessment Chart.				

STEPS:	YES	NO	RATING	COMMENTS:
2.5 Select Diarrhoea treatment Plan				
None A.				
Mild-Moderate B.				
Severe C.				
2.6 Weigh child use growth chart to determine growth status.				
Normal				
Moderate				
severe malnutrition				
2.7 Determine treatment of other illnesses/ complications.				
2.8 Decide which cases need to be sent home, to the ORT unit or to the ward.				

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FOR CHILDREN WITH NO DEHYDRATION (PLAN A) AND FOR ALL DIARRHOEA CASES BEFORE THEY GO HOME DO THE FOLLOWING:				
	Yes	No	Rating	Comments:
3. DEMONSTRATE ORS PREP. (or teach a health worker!)				
3.1 Wash hands				
3.2 Explain to mother the need for ORS.				
3.3 Pour 1 litre pitcher or 4 cups (250ml each or 2 500ml cups of clean water into a container.				
3.4 Empty a whole packet of ORS into the water and stir with a clean spoon.				
3.5 Cover container.				
3.6 Explain that after 24 hours any ORS left must be thrown away & fresh litre made.				
3.7 Check parents can do or explain these 5 steps.				
4. DEMONSTRATE ORS ADMINISTRATION (or teach a Health worker to!)				
4.1 Give ORS with a cup and spoon.				
4.2 Give ORS with child sitting up.				
4.3 Give a spoon every minute. If child wants more, give more				
4.4 Give half to one cup after each stool or vomit.				

	Yes	No	Rating	Comments
4.5 If child vomits, wait 10 mins. then give ORS more slowly every 2-3 mins.				
4.6 Check parent can do or explain these 5 steps.				
5. GIVE PARENT 2 ORS PACKETS TO TAKE HOME				
6. TEACH PARENT THE 4 RULES OF HOME TREATMENT.				
(or teach health worker to explain).				
6.1 Give more fluids				
6.2 Continue foods (including breastmilk)				
6.3 Bring the child back if diarrhoea continues for 2 days, there is blood in the stool and there is fever or child is not getting better.				
6.4 Help to prevent another diarrhoea episode by: washing hands before touching food, breast-feeding and NOT bottlefeeding				

YES & NO Column: Write Yes in the "YES" column if the skill has been performed.
Write No in the "NO" column if the skill has not been performed.

Rating Scale:
1 = Inadequate
2 = Needs Improvement
3 = Adequate

Comments Column: For any comments about performance of the skill.

CHECKLIST FOR COMMUNICATION SKILLS

- _____ greet mothers/introduce self
- _____ smile
- _____ have mothers share experiences with treating diarrhea
- _____ encourage mothers to ask questions
- _____ give positive response to mothers' questions
- _____ restate mothers' comments and questions (listening skills)
- _____ congratulate mother for a good health practice or healthy baby.
- _____ ask open-ended questions (e.g., What do you know about diarrhea?)
- _____ ask close-ended questions (e.g., Do you know what diarrhea is?)
- _____ ask questions to test mothers' understanding of health instruction
- _____ use appropriate language
- _____ summarize vital information given in talk
- _____ have mothers demonstrate skills taught in session
- _____ encourage mothers to tell others about diarrhea treatment

Additional Comments:

Suggested Recommendations for DTU Case Management Training Courses

The following list of items and suggestions is the result of experience gained from the recent Case Management Course presented at the Zambian DTU from October 22-27, 1990. It incorporates several lessons learned by the facilitators as well as suggestions from the participants provided at the close of the course.

I. General Comments

1. Give name tags to each participant and all DTU faculty and staff members listing the person's name, function and address of their work.
2. Provide cushions (foam pads) for lecture room benches; also add a fan to the lecture room; improve the slide projector (PRITECH to provide new projector).

II. Course Content

1. In the first session, involve the participants in setting the course objectives; in addition to acquiring case management skills, these should include "training of trainer" and supervisory skills. In addition to "hands-on" experience in diarrhea management, the course should specifically provide for practical experience in training and supervision of health workers, communication with mothers together with case management of at least one new patient each day.
2. Involve the participants in the design and use of supervision checklists both for communication skills and case management skills. Have all trainees become accustomed with use of the case management and supervisory skills checklists developed in the course with their input both for self-monitoring as well as for supervision of workers under them in their home facility.
3. Include the use of the child health cards as part of the patient record; agree on an analysis of the growth monitoring data which corresponds to the definitions for normal, mild-moderate, and severe growth failure. Also stress the card's use in updating vaccinations, especially measles.
4. Use the exercises from Talking with Mothers to teach communications skills; apply the same techniques presented in Talking with Mothers to all case presentations.

5. Emphasize instruction to mothers on use of home available fluids by naming specific home available fluids which have already been identified as being in use; also instruct on volume of these fluids to be used at home.

III. Course Organization

1. Convene all the available facilitators for discussion and agreement on the course objectives and agenda beforehand; schedule the times when the facilitators are expected to be available at the DTU for case presentations and monitoring of participants' performance.

2. Finalize the course agenda beforehand with faculty and present it on the first day to the participants; then adhere to the agenda as much as possible during the subsequent five days.

3. Divide the participants into groups of three each with a facilitator assigned to each group; rotate the facilitators daily among the groups for monitoring the case presentations given by the trainees.

4. Introduce the trainees to the assessment form and proceed immediately to the ward for work-up of the first cases assigned. Be sure the facilitators are on hand to observe closely the trainees' management intervening if correction is necessary, the didactic lecture will follow the case presentations.

5. After the facilitators have supervised case management of the first formal presentations by the trainees on day one, in subsequent case presentation sessions the group members can rotate the following functions:

- a. Member #1 functions as the "mother" providing the clinical information about the patient. Obviously this is the trainee who worked up the case.
- b. Member #2 serves as the "health worker" interviewing the "mother."
- c. Member #3 functions as the "supervisor" of the "health worker" who in turn comments on the case management and communications skills demonstrated in the interaction between the "mother" and the "health worker." The "health worker" can give feed-back to the "supervisor" regarding his input as a trainer/supervisor.

6. On day four of the course, run an epidemiology session using the accumulated data from all the participants' cases. The information to be classified should include: age of the patients, sex, severity of dehydration, growth status and finally outcome of the cases including numbers who died expressed as case fatality rate. This exercise shows the value of aggregated data and demonstrates its use at the facility level.

7. Provide sufficient time for detailed presentation of the participants' plans of action; also instruct them in a suggested format to be used for organization of the respective plans.

8. Provide sufficient time at the end of the course for the participants' evaluation to take place in writing rather than using an open discussion session. Involve Dr. Chimba and members of the CDD Secretariat in reviewing the plans of action as well as the evaluation comments provided by the participants.

IV. Possible Future DTU Activities

1. General practitioners (private, non-government physicians) should be included for case management instruction, perhaps using the established ORT corners for clinical training in ORT. This would be the next step in the "ripple effect" of DTU training.
2. In order to identify currently used home available fluids, undertake operations research on patients presenting at ORT corners in order to collect information on those fluids commonly used at home.
3. Promulgate from the DTU the latest SSS recipe to all CDD program staff; the current WHO recommendation is four teaspoons of sugar (level) and to one-half teaspoon salt added to 1000 milliliters of water. The WHO APO/CDD is dealing with this new policy.
4. Devise programs to involve the fathers who also come with mothers and children to the DTU but remain outside the building when the actual case management takes place. They should be aware of household management of diarrhea and appropriate infant/child feeding practices.
5. Follow-up all participants who have been trained at the DTU with a supervisory visit to identify the constraints to establishing ORT corners.

SUMMARY OF MEETING: PRITECH, HEALTHCOM, AND QUALITY ASSURANCE PROJECTS
November 20, 1990, 10:00 AM
AED Offices

Participants: PRITECH: Larry Casazza
 Elizabeth Herman
 Lauren Snyder

 HEALTHCOM: Judy Graeff
 Will Shaw (Deputy Director, HEALTHCOM)

 Quality Assurance Project: David Nicholas

Background

A meeting of representatives of PRITECH, HEALTHCOM, and the Quality Assurance Project (formerly PRICOR) was called by Larry Casazza to work out the strategy and pave the way for collaboration between the three projects on case management training and staff support in selected PRITECH countries. The idea of a collaborative effort resulted from separate presentations to PRITECH staff by Judy Graeff of HEALTHCOM and a team from PRICOR. In addition, in PRITECH's discussions with Dr. Mariam Claeson of WHO, the consensus was that little is known about the quality and effectiveness of case management training courses. PRITECH saw the opportunity to combine the expertise of the three projects to improve case management training and staff support systems in Zambia and possibly Uganda. An opportunity for collaboration on a training evaluation also exists in Cameroon. Although Larry Casazza and Judy Graeff had met before to discuss the possibility of collaboration on training, this preliminary meeting was the first at which all three projects were present.

HEALTHCOM's expertise relative to the collaborative effort is in the area of using behavioral analysis principles to develop innovative, participatory training approaches and to design the supervisory support system. The Quality Assurance Project has expertise in evaluating the competency of health workers following training. PRITECH is beginning a substantial training effort in Zambia, has plans for a similar effort in Uganda, and has been involved in ongoing training of health workers in Cameroon, where the former PRITECH representative initiated and helped to implement an innovative training approach emphasizing communication skills in addition to clinical skills.

The idea is that each of the three projects' particular areas of expertise and resources related to health worker training will be combined to improve the effectiveness of case management and supervisory skills at both the household and health facility levels. In Zambia and Uganda, there are opportunities for collaborative efforts to develop, implement, and evaluate new training approaches in DTUs and health facilities. A comparative evaluation of two types of training approaches is planned in Cameroon, providing an opportunity to collaborate on field-testing competency-based evaluation methodologies. The combined efforts would focus on how the three projects could be of assistance

in improving training and support systems in close collaboration with WHO staff in Geneva, Brazzaville, and field offices; WHO staff would be included on the teams where possible.

A brief summary of the meeting follows. Attachment 1, a memo by Larry Casazza ("Possible collaboration between PRITECH, HEALTHCOM, and Quality Assurance Projects in Diarrheal Case Management Training") provides more background information on the rationale for collaboration and possible activities to be undertaken.

Discussion

Larry Casazza opened the meeting and explained that the rationale for collaboration is PRITECH's concern that in general, the current method of training health workers does not seem to be as effective in improving performance as one would hope. In addition, there is a real need for more and better training of trainers (TOT) courses for DTU faculty and supervisors of health workers. Supervisors are often trained in case management techniques but may not learn important techniques to train the health workers for whom they are responsible.

Dr. Casazza asked Elizabeth Herman to explain her upcoming assistance to the Cameroon CDD program and her interest in possible collaboration with other projects. Dr. Herman discussed her work in the areas of nutritional training of health workers and communications. She will be working with the Cameroon CDD program on a comparative evaluation of the two types of training used in Cameroon: the "old", traditional approach emphasizing clinical skills versus the "new" approach emphasizing communication techniques, which was initiated by the former PRITECH representative. WHO is planning a comprehensive review of the Cameroon CDD program; the CDD program would like to have completed the comparative training evaluation before the WHO evaluation. Dr. Herman is interested in possible collaboration on the training evaluation and an evaluation of PRITECH's manual on "Talking with Mothers about Diarrhea" in Cameroon.

Most of the remainder of the meeting focused on the proposed collaboration on improving training in Zambia (and later, Uganda) since the DTU in Zambia officially opened recently and the training effort is underway. Dr. Casazza is very interested in: 1) trying out new training approaches based on HEALTHCOM's behavioral analysis principles and 2) developing useful training and supervisory tools. He would like to involve the Quality Assurance Project in evaluating health worker performance to test the effectiveness of a more participatory, needs-oriented training approach.

The present training program for DTU faculty and supervisors in Zambia is lacking a TOT component; supervisors receive training in clinical case management only. A reason for the lack of TOT courses in Zambia is that the DTU faculty (mostly pediatrics professors at the university) have not been trained in TOT. However, the major activities of the supervisors in their locales are mostly training and supervising the health workers for whom they are responsible and setting up ORT corners in area health facilities, not hands-on case management. While it is important for the supervisors to know

about correct case management techniques, the supervisors receive little if any training in the present DIU course to prepare them for their managerial and training duties.

To guide the discussion toward more concrete ideas on outputs needed in Zambia and ways in which the three projects could work together, Judy Graeff developed a chart (Attachment 2) with the following categories for the each level of health worker in Zambia: types of training needed, support needed, products needed, and evaluation. The purpose of the chart was to begin to pull together a systematic design for a comprehensive training effort that would reach all levels of health workers in Zambia.

Next Steps/ Plans of Action

The consensus was that all three projects are interested in working together on the training project in Zambia. One concern of the group was that the WHO country representative in Zambia be informed and in agreement with the collaborative project. Elizabeth Herman said that she would discuss this with Mariam Claeson of WHO in Geneva when she visits WHO in December.

Larry Casazza proposed that representatives from HEALTHCOM and the Quality Assurance Project accompany him on a proposed trip to Uganda and Zambia in January 1991. Both projects agreed that this date was feasible. The group settled on the following tentative dates:

Uganda	January 23-25
Zambia	January 28-30

The scope of work would be to develop a design of the entire activity (described in above chart), review training curricula, and address the need for TOT courses in Zambia. In Uganda, the team would present the concept of the new training approach to the Ugandan MOH. Dr. Casazza will see if Agma Prins, PRITECH's senior program manager for CESA, would be able to accompany the team on this trip since she is the senior program manager responsible for those countries. He will also discuss with her the views of the country programs on the collaborative training project.

Preliminary indications are that there is support in A.I.D. and WHO for the collaboration on training. Judy Graeff said that she talked with Connie Corrino, HEALTHCOM's CTO at A.I.D., about the possibility of collaborating with the other projects and got a positive reaction. The group thought that it would probably be possible to arrange the collaborative project without having to request contract amendments from A.I.D. Each representative agreed to talk to their A.I.D. contracts officer to see if the effort can be put together without having to request contract amendments.

One question concerned the possibility of buy-in funds to fund the training and materials in Uganda. Dr. Casazza said that there is no money available in the current buy-in for these activities. Agma Prins will be talking to the mission about the next buy-in, so she could discuss with the mission the

possibility of funding this project. Dr. Casazza felt that getting funding from the mission in Uganda would be difficult but perhaps possible. He will also explore the possibility of additional central PRITECH funds to support this activity. In Zambia, money is available to fund the proposed activities.

It was agreed that each project would propose to its management to pull its own weight financially; i.e., each project would cover the expenses of its staff. After talking with PRITECH acting director Bob Simpson and Agma Prins, Dr. Casazza will contact Drs. Graeff and Nicholas to talk about the next steps. In the meantime, Drs. Graeff and Nicholas will check on their (or their staff's) availability for the January trip and let Dr. Casazza know by next week (November 30).

Attachments

November 20, 1990

POSSIBLE COLLABORATION BETWEEN PRITECH, HEALTHCOM, AND QUALITY ASSURANCE
PROJECTS IN DIARRHEAL CASE MANAGEMENT TRAINING

As evaluation studies collect information on the quality of diarrheal case management at the facility level, the effectiveness of the investment in clinical and supervisory skills training has come into question. While other variables in addition to the training per se may explain why quality care of diarrheal cases is not carried out back at the home facility, the training methods routinely used in CDD training have been found lacking in some essential elements necessary for successful behavior change in health workers performance. Included among these would be trainee participation in objective setting and adequate practice in communication and supervisory skills as a part of the training. Also the emphasis in training has been on the antecedents to behavior change such as technical updating of causes of diarrhea with relatively little attention given to identifying consequences which can promote behavior change both in mothers and in health workers. For example, providing a friendly greeting to the mother may influence her to follow-up the child's care in the clinic; an arm band given to health workers designating them the ORT "expert" may help to keep their interest up in this important task.

A number of organizations have been involved in various aspects of diarrheal disease case management over the past several years. AS they have documented and shared their research results gained from field studies and pilot projects, it appears that this may be an opportune time to apply their findings to a field implementation situation. HEALTHCOM has applied behavioral analysis techniques to training; PRICOR II has developed health worker performance evaluation tools; PRITECH has established close ties with many national CDD programs through technical assistance inputs. Therefore, it is proposed to combine the technical experience of PRITECH, HEALTHCOM, and THE QUALITY ASSURANCE PROJECT in addressing some of the behavioral aspects of case management and supervisory skills training. In addition, it is important to upgrade the emphasis on nutrition in case management by incorporating messages on household management, breast-feeding, and appropriate weaning foods.

The overall purpose of the effort would be to improve case management both at the household and health facility levels. The objectives of this collaboration are as follows:

- 1] to improve the effectiveness of case management and supervisory skills training in CDD programs by:
 - . increasing trainee participation in the course
 - . increasing emphasis on nutritional management of diarrheal disease
 - . linking case management and supervisory skills into a "package" which includes:

- a] practicum in communications and supervisory skills as well as didactic lectures on the clinical subjects
- b] situational analysis methods to identify areas for improvement in the delivery of care to diarrheal patients,
- c] problem-solving exercises which address both "skills" and "performance" aspects of effective diarrheal case management.
- d] a competency-based evaluation tool to measure health worker performance.

Possible locations for field work:

- . Uganda and Zambia-DTU's and health facilities as sites to develop, implement and evaluate the new approaches to training.
- . Cameroon-field testing of competency-based evaluation methodologies

List of possible activities to be implemented:

- . undertake scheduled visit to Uganda, Zambia for TOT workshop[3-5 days]
- . undertake scheduled evaluation studies to:
 - 1] evaluate TOT training
 - 2] evaluate health worker performance by sampling three groups:
 - a] untrained workers

b] post "old" trained workers

c] post "new" workers - this group may be followed for 6-12 months and re-evaluated at a later date.

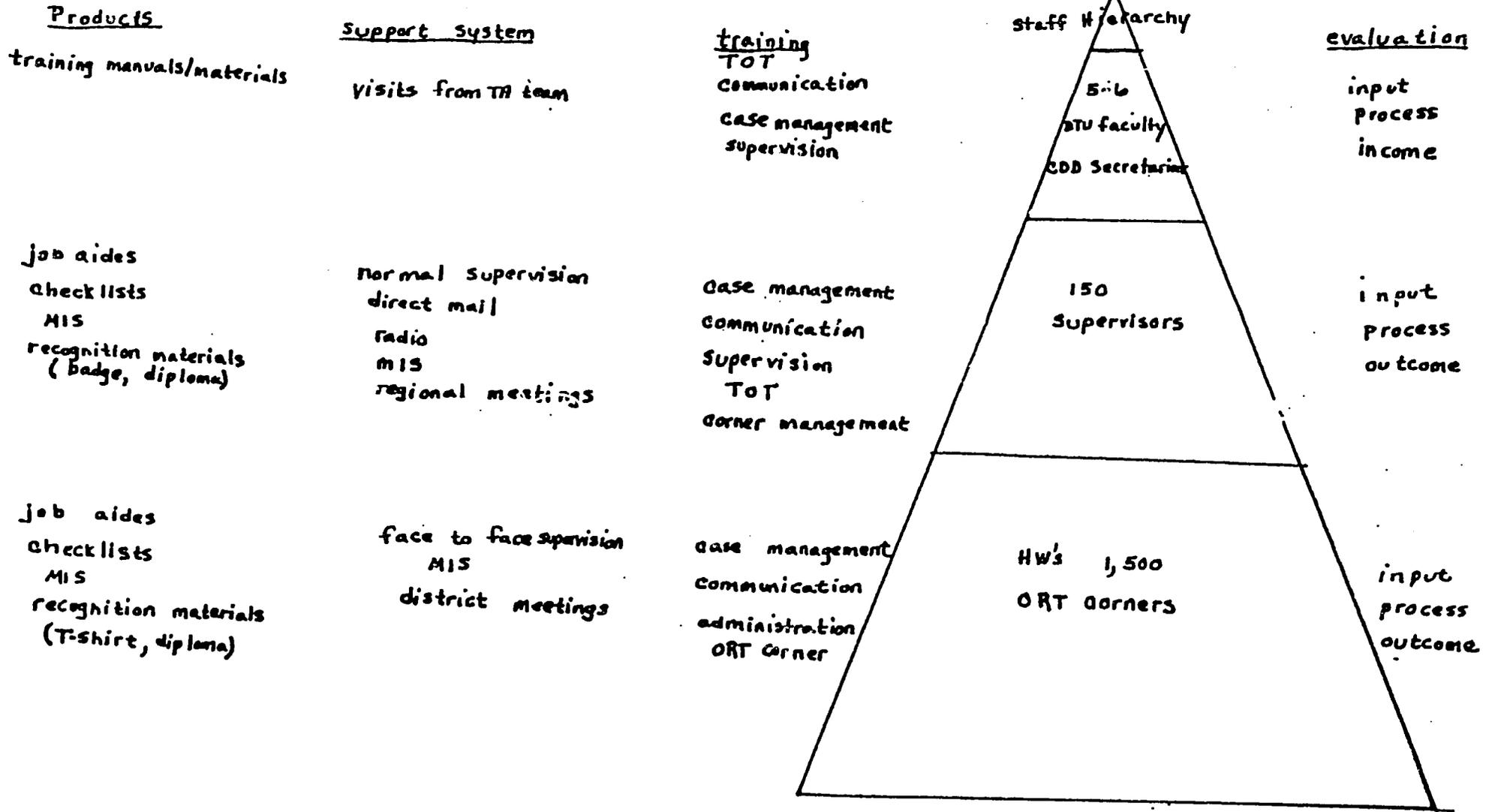
Suggested products:

1] manual for incorporating participatory and communication skills into CDD case management and supervisory skills courses

2] evaluation tool to measure TOT training effectiveness

3] evaluation tool to measure competency of health workers.

Attachment 2



(Tentative) Design for DTU/ORT corner training and Support Project
Zambia.

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Revised 12/20/90

Questionnaire for Mothers presenting at DTU
or health facility with child with diarrhea episode

I. Identification Data

Name of Mother _____
Date of interview _____

Obstetrical history:
No. of pregnancies _____
No. of deliveries _____
No. of abortions _____

Employed outside the home ____ yes ____ no
Baby accompanies mother to work? __ yes __ no
Work description: _____

Name of Baby _____
Weight (precision to 0.1 Kg) _____
Height (precision to 0.5 Kg) _____
Age in months _____

II. Questions

1. When you were pregnant with this child, did you get pre-natal care

____ Yes
____ No

2. If so, where did you go? (List local resources, including midwife and traditional midwives' home)

3. How many times were you examined?

_____ times

4. While being examined, did you get advised on how to feed your baby?

___ Yes
___ No

5. What was the advice? (Don't read the following answers to her; just check according to her spontaneous response)

- only breastfeeding
- breastfeeding & other milk if extremely needed
- " " food, i.e. rice, banana
- infant formula/from the bottle only
- other (specify): _____
- no answer

6. Do you know up to what age a baby will remain healthy by only breastfeeding?

___ Yes
___ No

7. If you know, up to what age, according to you, will a baby remain healthy by only breastfeeding? (Knowledge)
___ months

8. If you were asked by your daughter or neighbor/relatives concerning how to feed the newborn baby, what would be your advice?

- breastfeeding only
- " + infant formula, if needed
- " + solid food if needed (i.e., rice, banana)
- infant formula only
- cannot give advice

9. How old was the baby when you began to add the following to his/her diet?

	<u>days</u>	<u>weeks</u>	<u>months</u>
- water	___	___	___
- fruit juice	___	___	___
- cereals	___	___	___
- eggs	___	___	___
- sugar water	___	___	___
- teas	___	___	___
- other milks	___	___	___

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10. What did you give the baby to eat or drink yesterday?

	Yes	No
- water	<input type="checkbox"/>	<input type="checkbox"/>
- fruit juice	<input type="checkbox"/>	<input type="checkbox"/>
- breast milk	<input type="checkbox"/>	<input type="checkbox"/>
- cereals	<input type="checkbox"/>	<input type="checkbox"/>
- egg	<input type="checkbox"/>	<input type="checkbox"/>
- any other foods	<input type="checkbox"/>	<input type="checkbox"/>
- sugar water	<input type="checkbox"/>	<input type="checkbox"/>
- teas	<input type="checkbox"/>	<input type="checkbox"/>
- other milks	<input type="checkbox"/>	<input type="checkbox"/>

11. What is your opinion regarding breastfeeding?

Always	Seldom	Never	Don't Know
(1)	(2)	(3)	(9)

1. Is nutritious enough for the baby for at least four months
2. Can make a woman fat
3. Protects a baby against diarrhea and pneumonia
4. Makes a closer mother-child relationship
5. Makes breasts ugly
6. Makes it difficult to become pregnant

12. Where was the baby placed right after he/she was born?

- in the same bed with you
- in the same room with you, but separate bed
- in the nursery (baby room)
- 1 and 3
- 2 and 3
- don't know

13. When, after the baby was born, did you start breastfeeding him/her?

_____ days

14. Did you give your baby the early milk?

_____ Yes	<input type="checkbox"/>
_____ No	<input type="checkbox"/>

15. How do you know that your baby is hungry/thirsty, and wants to be breastfed?

- the baby cries
- the baby is uneasy
- the baby cannot sleep
- other

16. Do you breastfeed your child every time he/she cries, gets uneasy, or cannot sleep?

___ Yes
 ___ No

17. Are you currently breastfeeding the baby?

___ Yes
 ___ No

18. If not, at what age was the baby when you stopped?

_____ weeks, _____ months

19. What was the reason for having stopped breastfeeding? (Write all answers)

- child refused
- no more milk
- became pregnant again
- became severely ill
- child became severely ill
- child is big, started to walk
- other: _____

20. If still breastfeeding, do you follow a schedule to breastfeed your baby?

___ Yes
 ___ No

21. How many times did you breastfeed your baby from the time you got up yesterday to lunch time yesterday?

_____ times

22. How many times did you breastfeed your baby from lunch time to the time you went to bed yesterday?

_____ times

23. How many times during the night did you breastfeed your baby?

_____ times

24. What breast do you use to breastfeed your baby?

- right side
- left side
- alternate both breasts
- right side at one time, and left at next time
- no pattern
- both sides at beginning, but for certain reasons, only one side is used now

25. If she uses one side only, ask:

Why do you use one breast only to feed your child?

- inverted nipple
- the other nipple gets sore
- decrease of milk in the other breast
- child refuses to nurse from the other breast/
milk spills out
- other (specify): _____

- no answer

26. If your baby had diarrhea, which would you do?

- continue breastfeeding as usual
- increase the frequency of breastfeeding
- let the baby determine the frequency
- stop breastfeeding for the time being
- increase the frequency of breastfeeding when the diarrhea improves

27. Do you do something to keep the breast full or to try to increase the milk in it?

_____ Yes
_____ No

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28. If "yes," what did you do? (Don't read answers)

- drink a lot
- drink rice water regularly
- eat green peas regularly
- drink herb teas regularly
- massage the breast
- nurse the baby often
- eat lots of fruits and vegetables
- other: _____

29. When do you plan to completely wean the child? (age of child)

_____ months

- don't know

30. How do you know when to wean your child?

- the child refuses breastfeeding
- the child vomits everything after breastfeeding
- the child bites the nipple
- pregnant again
- told by someone else
- child starts to walk
- child is big
- other
- don't know

31. Do you feed your child with any other milk or fluid in addition to breastmilk at the present time?

_____ Yes

_____ No

32. What was the reason for you to have given another milk in addition to breastmilk?

- breastmilk insufficient
- child ceased to gain weight
- returned to work
- pregnant again
- easy to wean later
- other: _____

33. What kind of milk do you give to your child?
(at present)

34. Did any of the following persons influence your
decision to give your child another milk in
addition to breastmilk? (code most important)

- doctor
- midwife/nurse
- traditional healer/midwife
- parents-in-law/own parents
- neighbor/relative(s)
- husband
- self
- other: _____

Who was the most important of these persons?
Circle the answer.

35. How do you give the milk or fluid to your child?

- from a glass bottle
- from a plastic bottle
- with a spoon, from a glass/cup
- other: _____

36. If a bottle is ever used, how do you wash it?

- 1 in plain unboiled water
- 2 in plain unboiled water and soap
- (1), then boiled water
- (2), then boiled water
- (1), then rinse with hot water
- (2), then rinse with hot water
- other: _____

37. Does your baby have diarrhea today?

____ Yes
____ No

38. If yes, for how many days has the baby had
this bout of diarrhea?

_____ days

39. Has your baby been treated at the hospital or health center ever; before or since his/her birth?

____ Yes
____ No

40. If yes, how many times has he/she been seen?

_____ number of times
_____ don't know

41. If so, for which of the following diseases has he/she been treated? (#bouts)

- respiratory tract infection
- diarrhea
- skin rash
- other: _____

Thank you for cooperation in the study.

Revised 12/20/90

Questionnaire for DTU/Health Center Healthworkers

I. Identification Data

Name of Worker _____
Facility _____
Date of Interview _____

II. Questions

1. At the health facility, you work as

- doctor
- nurse
- health educator
- nurses' aide
- other

2. How long have you worked here?

_____ years
_____ months

3. Have you recently read something about the management of lactation and breastfeeding?

___ Yes
___ No

4. If yes, where did you read it?

- medical textbook
- professional journal
- handout from commercial pharmaceutical (formula) industry
- newspaper
- other: _____

5. About which of the following aspects of breastfeeding do you feel confident?

- how to give support to a breastfeeding mother
- how to deal with breastfeeding problems, such as insufficient milk supply
- how to convince mothers about breastfeeding
- how lactation works
- what to advise a working mother
- how to position a baby properly on the breast

5. Continued. . .

- what to advise a breastfeeding mother about contraception
- how to advise a mother about breastfeeding during or after a diarrhea episode
- other: _____

6. When should a post-partum mother give the first breast milk?

- at birth
- one hour after birth
- between 3 and 6 hours after birth
- between 6 and 12 hours after birth
- one day or more after birth
- when the milk comes in
- do not recommend mother's milk
- other: _____

7. How often would you recommend that the mother of a full-term (3.2 Kg) infant feed her baby?

- every two or three hours
- every three or four hours
- other schedule
- on demand
- do not recommend breastfeeding

8. Would you recommend water, sugar-water, or tea for the newborn during the first few hours of life?

_____ Yes

_____ No

9. Why? _____

10. What would you recommend for a newborn while waiting for the mother's milk to come in?

- water
- sugar water
- formula
- sugar water and formula
- nothing
- other: _____

11. At what age in months should the mother begin to wean the baby?

_____ months

12. At what age do you think the mother should introduce the following items into the child's diet in days weeks months

- | | | | |
|---------------|-------|-------|-------|
| - water | _____ | _____ | _____ |
| - fruit juice | _____ | _____ | _____ |
| - cereals | _____ | _____ | _____ |
| - eggs | _____ | _____ | _____ |
| - sugar water | _____ | _____ | _____ |
| - teas | _____ | _____ | _____ |

13. At what age should the child be weaned from the breast entirely?

_____ months of age
_____ years of age

14. Suppose women in the maternity wards for which are responsible are undecided about how they want to feed their babies, what do you think the maternity ward staff should do? (Interviewer give options)

- advise her to breastfeed
- advise her to bottlefeed
- discuss the advantages and disadvantages of both without trying to influence her in any decision
- other: _____
- no answer/don't know

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15. In your opinion, should mothers and babies be kept together in the same room day and night, or should they be separated during most or part of the day or night?

- kept together at all times, day and night
 - kept together during the day, but separated at night
 - kept separate most of the time, but brought to mothers at feeding times
 - other: _____
-
- no answer

16. If a breastfeeding mother with a one month old baby comes to you because she thinks she does not have enough breastmilk, what would you advise her to do first? (circle most important)

- 1 tell the mother to stop breastfeeding
 - 2 tell the mother to replace one or more feeds with formula or other milk
 - 3 tell the mother to breastfeed first, and then to give a supplement of formula or cows milk
 - 4 tell the mother to start giving some semi-solid food
 - 5 tell the mother to breastfeed more often
 - 6 tell the mother to eat a better diet.
 - 7 tell the mother to drink more
 - 8 other: _____
-
- 9 no answer

17. If a women has to return to work after two months, what do you think is the best milk to feed the baby with while the mother is at work?

- formula
- cows milk
- breast milk
- don't know/no answer

18. What sort of container should be used?

- bottle
- cup (and/or spoon)
- don't know/no answer

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19. Does the health facility have a written policy about promotion of breastfeeding?

____ Yes
____ No

20. If so, how do you let the doctors, nurses, and trainees know about this policy?

- Written policy on display (Interviewer check here if this is to be seen ____)
- guidelines distributed
- oral briefings to staff by me
- oral briefings to staff by ward sisters
- oral briefings to staff by someone else (who): _____
- other: _____
- not applicable

21. Does your clinic staff have on-going training in breastfeeding? If so, what is this training?

- No on-going training
- Yes: _____

22. Which of the following practices do you recommend?

- infants should be breastfed as soon as possible after birth, certainly within 6 hours
- mothers should be allowed to rest after delivery and the baby brought to them after 7 or 8 hours sleep
- infants should stay with their mothers at all times
- infants should ideally be kept in the nursery at night, so the mother can rest and be able to produce more milk the next day
- there should be no pre-lacteal feeds of honey, glucose or water
- babies should be given glucose feeds until the milk comes in

22. Continued. . .

- there should be no supplementary feeds of water or anything else
- if a mother's milk seems insufficient, then a baby should be given a supplement of milk or glucose water
- mothers should be encouraged to breastfeed their babies on demand, and timetable should suit the mother and baby and not the ward staff
- it is helpful to mothers to be able to establish a regular feeding schedule before they leave the hospital

23. What do you understand about the role of breast-feeding and the prevention of diarrhea?

24. If an expectant or newly delivered mother wants to bottlefeed her baby from birth, what would you advise her to do? (Interviewer give options)

- very strongly persuade her against it
 - advise her against it
 - allow her to make her own decision
 - advise her to bottlefeed if she can afford it
 - other: _____
-
- have never given advice on this
 - no answer

25. We have talked mostly about healthy mothers and healthy babies, but now I would like you to outline for me how you usually feed babies whose mothers have died or abandoned them, or who are extremely sick and cannot breastfeed.

- they are given infant formula
 - they are given cow's milk
 - another mother donates breastmilk
 - a relative is encouraged to wet-nurse
 - other: _____
-
- no answer/don't know

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31. During a diarrhea episode in a child four months of age or younger, what do you recommend?

- Continue breastfeeding and feeding as usual
- stop foods but increase breastfeeding
- stop all food and breastfeeding during the episode
- increase feeds and breastfeeding frequency when the child renews his interest.

32. During a diarrhea episode in a child more than four months of age, what do you recommend?

- Continue breastfeeding and feeding as usual
- stop foods but increase breastfeeding
- stop all food and breastfeeding during the episode
- increase feeds and breastfeeding frequency when the child renews his interest.

Thank you for your cooperation!

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Revised 12/20/90

Questionnaire for Hospital Healthworkers

I. Identification Data

Name of Worker _____
Facility _____
Date of Interview _____

II. Questions

1. At the hospital, you work as

- doctor
- nurse
- midwife
- nurses' aide
- other

2. What's your specialty?

- obstetrics
- pediatrics
- general practice
- resident
- intern
- student

3. In which area do you actually work?

- Labor and Delivery
- Post-Partum work
- Newborn nursing
- Pediatric outpatient area
- Prenatal outpatient area
- Other

4. How long have you worked there?

_____ years
_____ months

5. Have you read something about the management of lactation?

_____ Yes
_____ No

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6. If yes, where did you read it?

- medical textbook
- professional journal
- handout from commercial pharmaceutical (formula) industry
- newspaper
- other: _____

7. About which of the following aspects of breast-feeding do you feel confident?

- how to give support to a breastfeeding mother
- how to deal with breastfeeding problems i.e., inverted nipples, baby will not suck, mastitis or sore nipples
- how to convince mothers about breastfeeding
- how lactation works
- what to advise a working mother
- how to position a baby properly on the breast
- what to advise a breastfeeding mother about contraception
- other: _____

8. When do you recommend to a post-partum mother to give the first breast milk?

- at birth
- one hour to three hours after birth
- between 3 and 6 hours after birth
- between 6 and 12 hours after birth
- one day or more after birth
- when the milk comes in
- do not recommend mother's milk
- only on demand but at least every 3 hours
- other: _____

9. How often do you recommend that the mother of a full-term (3.2 Kg) infant to feed her baby?

- every two or three hours
- every three or four hours
- other schedule
- on demand only
- on demand but at least every 3 hours
- do not recommend breastfeeding

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10. Do you recommend water, sugar-water, or tea for the newborn during the first few hours of life?

___ Yes
___ No

11. Why? _____

12. What do you recommend for a newborn while waiting for the mother's milk to come in?

- water
- sugar water
- formula
- sugar water and formula
- nothing
- other: _____

13. a) At what age in months should the mother stop breastfeeding the baby?
_____ months

b) Up to what age should mothers exclusively breast-feed?
_____ months

14. At what age do you think the mother should introduce the following items into the child's diet in days weeks months

- | | | | |
|---------------|-------|-------|-------|
| - water | _____ | _____ | _____ |
| - fruit juice | _____ | _____ | _____ |
| - cereals | _____ | _____ | _____ |
| - milk | _____ | _____ | _____ |
| - sugar water | _____ | _____ | _____ |

15. Do you think that all mothers of all healthy babies should have to breastfeed their babies while in both government and private hospitals in Zambia? (Interviewer give options)

- yes
- only in government hospitals
- no, mothers should be able to choose how to feed the baby
- other: _____

- no answer

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16. If women in the maternity wards for which you are responsible are undecided about how they want to feed their babies, what do you think the maternity ward staff should do?
(Interviewer give options)

- advise her to breastfeed
- advise her to bottlefeed
- discuss the advantages and disadvantages of both without trying to influence her in any decision
- other: _____

- no answer/don't know

17. In your opinion, should mothers and babies be kept together in the same room day and night, or should they be separated during most or part of the day or night?

- kept together at all times, day and night
- kept together during the day, but separated at night
- kept separate most of the time, but brought to mothers at feeding times
- other: _____

- no answer

18. If a breastfeeding mother with a one month old baby comes to you because she thinks she does not have enough breastmilk, what would you advise her to do first? (circle most important)

- 1 tell the mother to stop breastfeeding
- 2 tell the mother to replace one or more feeds with formula or other milk
- 3 tell the mother to breastfeed first, and then to give a supplement of formula or cows milk
- 4 tell the mother to start giving some semi-solid food
- 5 tell the mother to breastfeed more often
- 6 tell the mother to eat a better diet
- 7 tell the mother to drink more
- 8 other: _____

9 no answer

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19. If a women has to return to work after two months, what do you think is the best milk to feed the baby with while the mother is at work?

- formula
- cows milk
- breast milk
- don't know/no answer

20. What sort of container should be used?

- bottle
- cup (and/or spoon)
- don't know/no answer

21. Can you tell me who is responsible for overall policy decisions about how babies are fed on the maternity ward in your hospital? (eg. whether babies should be given feeds other than breastmilk, or whether babies should be separated from their mothers or kept with them all the time)

- the MOH
 - the medical officer in charge
 - the matron
 - the ward sister
 - the doctor (which doctor) _____
 - nurses do what they want
 - mothers do what they want
 - other: _____
-
- no answer/don't know

22. Can you tell me who is responsible for day to day decisions about how individual mothers feed their babies in the maternity ward?

- the MOH
 - the medical officer in charge
 - the matron
 - the ward sister
 - the doctor (which doctor) _____
 - nurses do what they want
 - mothers do what they want
 - other: _____
-
- no answer/don't know

23. Does the maternity facility (facilities) in your charge have a written policy about promotion of breastfeeding?

____ Yes
____ No

24. If so, how do you let the nurses know about this policy?

- Written policy on display (Interviewer check here if this is to be seen____)
- guidelines distributed
- oral briefings to staff by me
- oral briefings to staff by ward sisters
- oral briefings to staff by someone else (who): _____
- other: _____
- not applicable

25. Do your maternity ward staff have on-going training in breastfeeding? If so, what is this training?

- No on-going training
- Yes: _____
- _____
- _____
- _____

26. Which of the following practices do you recommend?

- infants should be breastfed as soon as possible after birth, certainly within 6 hours
- mothers should be allowed to rest after delivery and the baby brought to them after 7 or 8 hours sleep
- infants should stay with their mothers at all times
- infants should ideally be kept in the nursery at night, so the mother can rest and be able to produce more milk the next day
- there should be no pre-lacteal feeds of honey, glucose or water
- babies should be given glucose feeds until the milk comes in

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26. Continued. . .

- there should be no supplementary feeds of water or anything else
- if a mother's milk seems insufficient, then a baby should be given a supplement of milk or glucose water
- mothers should be encouraged to breastfeed their babies on demand, and timetable should suit the mother and baby and not the ward staff
- it is helpful to mothers to be able to establish a regular feeding schedule before they leave the hospital

27. What do you understand about the role of breast-feeding and the prevention of diarrhea?

28. If an expectant or newly delivered mother wants to bottlefeed her baby from birth, what do you advise her to do? (Interviewer give options)

- very strongly persuade her against it
- advise her against it
- allow her to make her own decision
- advise her to bottlefeed if she can afford it
- other: _____
- have never given advice on this
- no answer

29. We have talked mostly about healthy mothers and healthy babies, but now I would like you to outline for me how you usually feed babies whose mothers have died or abandoned them, or who are extremely sick and cannot breastfeed.

- they are given infant formula
- they are given cow's milk
- another mother donates breastmilk
- a relative is encouraged to wet-nurse
- other: _____
- no answer/don't know

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30. Have any of the infant formula companies contacted you regarding infant feeding during the last three years?

Yes
No

31. If yes, which ones?

- Nestle'
- Wyeth
- Other: _____
- not applicable

32. Can you give me details of what they wanted to do?

- persuade us to buy their products
- donate free supplies to the hospital
- give free samples to mothers
- put up posters
- give me a free gift
- visit the wards
- talk to me about AIDS
- tell me about a new product
- they support a conference or a trip
- Other: _____
- _____
- _____
- _____
- _____
- _____
- No answer/not applicable

Thank you for your cooperation in the study.

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Revised 12/20/90

Hospital-based Questionnaire for Post-Partum Mothers

I. Identification Data

Name of Mother _____

Date of interview _____

Obstetrical history:

No. of pregnancies _____

No. of deliveries _____

No. of abortions _____

Name of Baby _____

Weight (precision to 0.1 Kg) _____

Height (precision to 0.5 Kg) _____

II. Questions

1. When you were pregnant with this child, did you get pre-natal care

_____ Yes
_____ No

2. If so, where did you go? (List local resources, including midwife and traditional midwives' home)

3. How many times were you examined?

_____ times

4. While being examined, did you get advised on how to feed your baby?

___ Yes
___ No

5. What was the advice? (Don't read the following answers to her; just check according to her spontaneous response)

- only breastfeeding
- breastfeeding & other milk if extremely needed
- " " food, i.e. rice, banana
- infant formula/from the bottle only
- other (specify): _____
- no answer

6. Up to what age will a baby remain healthy by only breastfeeding, that is, no added food, other milk or even water?

___ Yes
___ No

7. If you know, up to what age, according to you, will a baby remain healthy by only breastfeeding? (Knowledge)

___ months

8. If you were asked by your daughter or neighbor/ relatives concerning how to feed the newborn baby, what would be your advice?

- breastfeeding only
- " + water
- " + infant formula, if needed
- " + solid food if needed (i.e., rice, banana)
- cannot give advice

9. According to you, what is the best age to stop breastfeeding a child altogether?

___ months
- Don't know

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10. What is your opinion regarding breastfeeding?

Always (1)	Seldom (2)	Never (3)	Don't Know (9)
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- 1. Is nutritious enough for the baby
- 2. Can make a woman fat
- 3. Protects a baby against diarrhea and pneumonia
- 4. Makes a closer mother-child relationship
- 5. Makes breasts ugly
- 6. Makes it difficult to become pregnant

<input type="checkbox"/>

11. Where was the baby placed right after he/she was born?

- in the same bed with you
- in the same room with you, but separate bed
- in the nursery (baby room)
- 1 and 3
- 2 and 3
- don't know

<input type="checkbox"/>

12. When, after the baby was born, did you start breastfeeding him/her?

_____ hours

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

13. Did you give your baby the early milk?

_____ Yes
_____ No

<input type="checkbox"/>
<input type="checkbox"/>

<input type="checkbox"/>

14. How do you know that your baby is hungry/thirsty, and wants to be breastfed?

- the baby cries
- the baby is uneasy
- the baby cannot sleep
- other

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

<input type="checkbox"/>

15. Do you breastfeed your child every time he/she cries, gets uneasy, or cannot sleep?

_____ Yes
_____ No

<input type="checkbox"/>
<input type="checkbox"/>

<input type="checkbox"/>

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16. Do you follow a schedule to breastfeed your baby?

____ Yes
____ No

17. How many times did you breastfeed your baby from the time you got up yesterday to lunch time yesterday?

_____ times

18. How many times did you breastfeed your baby from lunch time to the time you went to bed yesterday?

_____ times

29. How many times during the night did you breastfeed your baby?

_____ times

20. What breast do you use to breastfeed your baby?

- right side
- left side
- alternate both breasts
- right side at one time, and left at next time
- no pattern
- both sides at beginning, but for certain reasons, only one side is used now

21. If she uses one side only, ask:

Why do you use one breast only to feed your child?

- inverted nipple
- the other nipple gets sore
- decrease of milk in the other breast
- child refuses to nurse from the other breast/
milk spills out
- other (specify): _____

- no answer

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22. Did you do something to keep the breast full or to try to increase the milk in it?

___ Yes
___ No

23. If "yes," what did you do? (Don't read answers)

- drink a lot
- drink rice water regularly
- eat green peas regularly
- drink herb teas regularly
- massage the breast
- nurse the baby often
- eat lots of fruits and vegetables
- other: _____

24. When do you plan to stop breastfeeding your child? (age of child)

___ months
- don't know

25. Do you plan to feed your child with any other milk or fluid in addition to breastmilk at the present time?

___ Yes
___ No

26. Do you plan to give water or sugar water?

___ Yes
___ No

27. Did any of the following persons influence your decision to give your child another milk in addition to breastmilk? (code most important)

- doctor
- midwife/nurse
- traditional healer/midwife
- parents-in-law/own parents
- neighbor/relative(s)
- husband
- self
- other: _____

Who was the most important of these persons?
Circle the answer.

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28. How do you give the milk to your child?

- from a glass bottle
 - from a plastic bottle
 - with a spoon, from a glass/cup
 - other: _____
-

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