

Workshop Report

Inter-country Training Workshop on Management of Severe Childhood Malnutrition

Sponsor: World Health Organization Western Pacific Regional Office

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Venue: National Pediatric Hospital, Phnom Penh, Cambodia

Date: 26 November-6 December, 2003

Introduction

Malnutrition is implicated in about 60% of all under-five childhood deaths globally. The burden of childhood malnutrition is especially high in countries of South-East Asia and the Western Pacific region of the World Health Organization. The severe form of malnutrition – children with “skin and bones” or swelling of feet – is associated with a high case-fatality rate that has remained unchanged over the last five decades. The WHO has formulated and published guidelines for management of severe malnutrition in children (*Management of severe malnutrition: a manual for physicians and other senior health workers*). Centers that have implemented the guidelines have experienced dramatic reduction in case fatality rates among severely malnourished children. It is now imperative that the guidelines be implemented across hospitals and other health care facilities in Asia in order to reduce the excessively high case-fatality rate among children with severe malnutrition in this region. The training workshop is a preliminary step to implementation of the guidelines. The workshop is based on six instructional modules that cover the rationale for and the practical tasks involved in managing cases and in supervising a severe malnutrition ward. The modules were field-tested in ICDDR,B in December 2000 and subsequently modified. Workshops based on these modules have been successfully organized and run in Afghanistan, Africa, Bangladesh and Latin America.

Justification for holding the training workshop

The training workshop, specifically designed for the WHO guidelines, is of the 'training of tutors' type. Facilitators are trained initially, who subsequently train other doctors and nurses. The workshop, therefore, trains health professionals and at the same time develops facilitators who will train others in future. It imparts knowledge and 'best practice' in case management, which are essential in providing optimum care and reducing case fatality among severely malnourished children. Based on felt needs, the WHO Western Pacific Regional Office decided to hold such a workshop aimed at directly improving the management of severe malnutrition in the region. Participants from countries that had a greater burden of childhood malnutrition were invited to take part in the workshop i.e. doctors and nurses from Cambodia, Lao People's Democratic Republic and the Philippines. The National Pediatric Hospital, Phnom Penh, Cambodia was selected to host the workshop. The hospital manages a substantial number of severely malnourished children every day, which is an important factor for teaching purposes. The staff is aware of the need for improved management of severe malnutrition and accustomed to hosting and facilitating training courses. The classrooms are well equipped and close to the hospital wards - an important time saving factor.

Objectives of the training workshop

The main objective of the training workshop was to impart knowledge and develop skills on 'best practices' in the management of the severely malnourished child. Without implementation of 'best practices' it will be impossible to reduce the high case-fatality rates among severely malnourished children in countries of the Western Pacific region. But just organizing the workshop will not be enough. It has to be ensured that the participants practice what they learn from the workshop. Attempts were made to accomplish this in two steps - by selecting participants who are committed and devoted to the management of severely malnourished children, and by evaluating their work and performance after a certain period of time.

Contents and methods used in the training workshop

The workshop used the seven prescribed training modules i.e. Introduction, Principles of care, Initial management, Feeding, Daily care, Monitoring and problem solving, and Involving mothers in care. The modules are supported by a photograph booklet, video and support materials that include laminated reference cards, answer sheets, examples of records, etc. There were separate guidebooks for course director, facilitators and clinical instructors. The methods employed were self-reading, written exercises, group discussions, individual feedbacks, role plays, video demonstration, and practice in a severe malnutrition ward.

Organization of the training workshop

The inter-country workshop on management of severe childhood malnutrition was held in the National Pediatric Hospital, Phnom Penh, Cambodia from 26 November-6 December, 2003. The workshop was organized and sponsored by the World Health Organization Western Pacific Regional Office. Workshop arrangement and logistics were done by WHO Cambodia. The training modules (including guidebooks for Course Director, Facilitators, and Clinical Instructor) were provided by the Department of Nutrition for Health and Development, WHO Headquarters.

There were 32 participants from 3 countries including Cambodia, Lao People's Democratic Republic and the Philippines. Of the 32 participants, 8 were trained as Facilitators and 3 as Clinical Instructors for the training of the 21 Trainees (Table 1). Severe malnutrition treatment facilities in the hospitals from where the participants came are shown in Table 2. The course was directed by Dr Tahmeed Ahmed with assistance from Dr Sophie Leonard, WHO Regional Office for the Western Pacific. Dr Sultana Khanum of the Department of Nutrition for Health and Development, WHO Geneva, was the resource person.

The duration of facilitators' training and the actual training of the participants were 4 and 6 working days respectively. Working hours were from 7:30 am to 5:30 pm. After a discussion at the end of the facilitators' training, it was decided that nurses and doctors be placed in separate groups for proper facilitation. All participants completed the modules, although the nurses' groups had to rush through the modules because of some problems in understanding the module contents.

The organization of the training workshop was excellent despite the large number of participants - highest compared to the earlier workshops on management of severe malnutrition. This was possible because of the untiring help and cooperation of WHO Cambodia, especially Dr Severin Von Xylander and Ms La-Ong Tokmoh, and the staff of National Pediatric Hospital, Phnom Penh. Dr Sophie Leonard deserves special thanks for highlighting the importance of having the workshop, organizing and sponsoring it. Dr. Sultana Khanum of WHO Geneva, who was instrumental in developing the training modules, was extremely helpful in providing technical expertise.

Participants' review of the training workshop

Questionnaires were administered to the participants on the last day of the workshop for their comments and opinion about the training workshop. Their comments on the individual modules and methods are summarized in Table 3. Other comments and suggestions of the participants are as follows.

Good things about the training workshop

The workshop was well organized. Most of the participants felt that they were benefited with the knowledge received on danger signs of severe malnutrition, preparation of diets and the critical care pathway (CCP). The clinical aspects and the different exercises were good. The number of participants was optimal, so was the space for the sessions. The workshop gave the Cambodian participants an opportunity to learn about the nutrition situation in the Philippines and Lao PDR. Some participants also wrote that the presence of an experienced course director was very helpful.

Things not good about the training workshop

Time was felt to be too little for so much of reading. The facilitators' training was too short. Some felt that the group was heterogeneous - clinicians and non-clinicians - which was a problem in understanding the modules and hindered progress of the group. Language was a major problem, especially with the nurses. Many of the participants faced problems in understanding meanings of words in the modules.

Comments on further improvement of the training workshop

Some participants felt that the duration of the workshop should be extended by 2 days. The facilitators' training should be longer. The modules should be given before hand so that the participants can have an idea about the contents. Pre- and post-tests have been suggested. The modules should be translated in the local language. The clinical sessions should be more organized with ample cases of severe malnutrition for practice and demonstration. Diagrams or flow-charts will help in the understanding of initial management. Diagrams regarding the management of dehydration and shock were actually drawn on the board by one group of participants who found it to be very useful. Participants should be selected from individuals who are actually involved in the management of severely malnourished children.

There were a couple of suggestions regarding the module on initial management. One was on the use of dextran 40 (a plasma expander), instead of blood transfusion, in the management of septic shock in regions with high rates of HIV transmission i.e. Cambodia. Another suggestion was to use ceftriaxone, a third-generation cephalosporin that can be administered once daily, as an alternative to multiple doses of ampicillin and gentamicin for children with complications.

Recommendations

- National level training to be organized in the countries. As an initial step, training courses should be organized in the provinces of Cambodia, in Vientiane and in an appropriate region in the Philippines.
- Basic materials i.e. ingredients for preparing therapeutic diets, CMV etc should be provided to hospitals having trained staff on board.
- A follow-up monitoring and evaluation system should be developed and implemented to see whether a particular health-care facility from where participants were trained have actually implemented the WHO guidelines. If not, then the reasons for not doing so, problems faced by the trained participants, performance of the facility in terms of management, and steps for improvement will be ascertained.

Recommendations for the Malnutrition Ward of National Pediatric Hospital, Phnom Penh

- All severely malnourished children (with any complication i.e. diarrhea, pneumonia or sepsis) should be admitted in the Malnutrition Ward. Admission criteria should be posted in the Emergency Room and Out-patient Department.
- Emergency treatment of severely malnourished children in the Emergency Room should be in accordance with WHO guidelines. ReSoMal and therapeutic diets should be provided in the ER.
- A part of the money that UNICEF provides for buying food for the ward should be used for purchasing heat-treated cow's milk that can be used in F-75 and F-100. The rest of the money can be used for preparing porridge.
- Officials from WHO Cambodia should meet with the NPH staff every month to review the progress in improved management of severely malnourished children. UNICEF may also be taken on board.
- Baseline data on severely malnourished children treated in the Malnutrition Ward should be collected over the last 6 months - age, socioeconomic characteristics, associated morbidity, case-fatality rate, rates of weight gain, duration of stay, discharge against medical advice etc.
- At the end of one year following the training, data of the one-year period should be evaluated and compared with that taken at baseline.
- Intravenous infusions must be reduced.
- The heights of beds for children is dangerously high and should be reduced.

Table 1. Profile of participants of training workshop on management of severe malnutrition, 26 November-6 December 2003, Phnom Penh, Cambodia

	Total number	Doctors	Nurses	Non-clinical job	Males	Females	Currently managing malnutrition
Facilitators	8	6	1	1	5	3	6
Clinical Instructors	3	2	1	-	2	1	3
Trainees	21	12	8	1	14	7	17

Table 2. Severe malnutrition treatment facilities in the hospitals of training workshop participants

Hospital	Separate malnutrition ward	Comments
Mahasot Hospital Vientienne Lao PDR	No	SM children are treated in the ICU and then transferred to the Pediatrics ward
National Pediatric Hospital Phnom Penh, Cambodia	Yes	10 beds
Sethathirath Hospital Vientienne, Lao PDR	No	SM children are treated in the ICU and then transferred to the Pediatrics ward
Mongkul Borei Referral Hospital, Cambodia	Yes	
Bantey Meanchey Referral Hospital, Cambodia	No	
Stung Treng Referral Hospital, Cambodia	No	SM children are treated in the Pediatrics ward
Svay Rieng Referral Hospital Cambodia	No	SM children are treated in ER & Pediatrics ward
Kratie Province Referral Hospital, Cambodia	No	SM children are treated in ER
Philippine Children's Medical Center, Quezon City, Philippines	Yes	
Angkor Children Hospital Cambodia	No	

Table 3. Training workshop on management of severe malnutrition, 26 November-6 December 2003, Phnom Penh, Cambodia: evaluation by participants

	Very useful	Useful	Somewhat useful	Useless	No answer
Principles of Care	28 (90.3)	3 (9.7)			
Initial Management	28 (90.3)	3 (9.7)			
Feeding	29 (93.5)	2 (6.5)			
Daily Care	30 (96.8)	1 (3.2)			
Monitoring and Problem Solving	29 (93.5)	2 (6.5)			
Involving Mothers in care	24 (77.4)	7 (22.6)			
Video: Transformations	19 (63.3)	10 (33.3)	1 (3.3)		
Video: Emergency Treatment	22 (73.3)	8 (26.7)			
Video: Teaching about feeding	22 (73.3)	8 (26.7)			
Video: Mental Development	17 (60.7)	9 (32.1)	2 (7.1)		
Photograph examples and exercises	25 (86.2)	3 (10.3)	1 (3.4)		
Clinical sessions	25 (86.2)	4 (13.8)			

	Time too short	Time adequate	Time too long	No answer
Written exercises followed by discussions with a Facilitator	8 (26.7)	21 (70)	1(3.3)	
Photo exercises	5 (16.1)	25 (80.6)	1(3.2)	
Videos	10 (32.3)	20 (64.5)	1(3.2)	
Role plays	9 (30)	20 (66.7)	1(3.3)	
Group discussions	2 (6.5)	28 (90.3)	1(3.2)	
Oral drills	4 (12.9)	26 (83.9)	1(3.2)	
Clinical sessions	8 (25.8)	21 (67.7)	2 (6.5)	
Entire course	7 (24.1)	19 (65.5)	3 (10.3)	

Table 4. Schedule for facilitators' training. WHO inter-country training workshop on management of severe malnutrition, National Pediatric Hospital, Phnom Penh, November 2003

FACILITATOR DAY 1 (Wednesday, November 26, 2003)		
	Activity	Schedule
1	Introduction to facilitator training A. Context of facilitator training B. Materials needed C. Objectives of facilitator training D. Teaching methods E. Schedule for facilitator training F. Introduction of <i>Facilitator Guide</i>	7:30–8:15 a.m.
2	Module: <i>Introduction</i> A. Review and demonstration B. Facilitator techniques: Working with a Co-facilitator	8:15–8:30 a.m.
3	Module: <i>Principles of Care</i> A. Facilitator techniques: Introducing a module B. Reading and work on module C. Facilitator techniques: Leading a discussion D. Reading and work on module E. Facilitator techniques: Adapting for nurses' groups F. Facilitator techniques: Individual feedback G. Reading and work on module, practice group discussion H. Facilitator techniques: Oral drills I. Reading and short answer exercises J. Facilitator techniques: Video activity K. Facilitator techniques: Summarizing a module	8:30–10:00 a.m. 10:15 am-12 pm 1:30-2:15 PM
	TEA	10:00–10:15 am
	LUNCH	12:00–1:00 PM
	WARD TOUR	1:00-1:30 PM
4	Module: <i>Initial Management</i> A. Reading and practice introducing module B. Facilitator techniques: Conducting a demonstration	2:15–3:15 PM 3:30-5 PM
	TEA	3:15–3:30 pm
6	Assignments for the next day: A. Read and do exercises in Initial Management module B. Read corresponding facilitator guidelines C. Prepare for assigned activities	5:00–5:30 PM

Schedule for facilitators' training (continued)

FACILITATOR DAY 2 (Thursday, November 27, 2003)		
	Activity	Schedule
1	Continuation of Module: <i>Initial treatment</i> A. Practice of facilitator techniques B. Facilitator techniques: Coordinating role plays	7:30–10:00 am 10:15–10:45 am
	TEA	10:00–10:15 am
2	Module: <i>Feeding</i> A. Introduction and Exercise A, preparing F-75 and F-100 B. Facilitator techniques: While participants are working C. Reading/work through Exercise B; practice of facilitator techniques D. Reading/work through end of module; practice of facilitator techniques	10:15–12:00 PM 1:00–3:15 PM 3:30–5:00 PM
	LUNCH	12:00–1:00 PM
	TEA	3:15–3:30 PM
3	Assignments for the next day A. Read and do exercises in <i>Daily Care</i> module B. Read corresponding facilitator guidelines C. Prepare for assigned activities	5:00–5:30 PM

FACILITATOR DAY 3 (Friday, November 28, 2003)		
	Activity	Schedule
1	Clinical practice session	7:30–9:30 am
2	Module: <i>Daily Care</i> A. Introduction of module, discussion of questions B. Practice of facilitator techniques	9:30–10:00 am 10:15–12 PM
	TEA	10:00–10:15 am
	LUNCH	12:00–1:00 PM
3	Module: <i>Monitoring and problem solving</i> A. Introduction and work on the module B. Practice of facilitator techniques	1:00–3:15 PM 3:30–5:00 PM
	TEA	3:15–3:30 PM
4	Assignments for the next day A. Read and do exercises in <i>Involving Mothers in Care</i> module B. Read corresponding facilitator guidelines C. Prepare for assigned activities	5:00–5:30 PM

Schedule for facilitators' training (continued)

FACILITATOR DAY 4 (Saturday, November 29, 2003)		
	Activity	Schedule
1	Module: <i>Involving Mothers in Care</i> A. Introduction of module B. Practice of facilitator techniques C. Facilitator techniques: Review	7:30–10:00 am
	TEA	10:00–10:15 am
2	Practical arrangements for the course Closing remarks to facilitators Plans for first day of course	10:15–12:00 PM
	LUNCH	12:00-1:00 PM
3	Review of the modules and Q & A	1:00-3:15 PM 3:30-5:30 PM
	TEA	3:15–3:30 PM

Table 5. Schedule for training. WHO inter-country training workshop on management of severe malnutrition, National Pediatric Hospital, Phnom Penh, November 2003

Day	Group I (Doctors)	Group II (Doctors)	Group III (Nurses)	Group IV (Nurses)
Day 1	7:30-8:00: Registration 8:00-9:00: Opening & tea 9:00-10:00: Module 1 <i>Introduction</i> 10:00-11:00: Module 2 <i>Principles of care</i> 11:00-12:00: Tour of wards 12:00-13:00: Lunch 13:00-15:00: Video and Module 2 continued 15:00-15:15: Tea break 15:15-17:15: Module 2 end 17:15-17:30: Meeting of facilitators	7:30-8:00: Registration 8:00-9:00: Opening & tea 9:00-10:00: Module 1 <i>Introduction</i> 10:00-12:00: Module 2 <i>Principles of care</i> 12:00-13:00: Lunch 13:00-14:00: Tour of wards 14:00-15:00: Module 2 continued 15:00-15:15: Tea break 15:15-17:15: Video and Module 2 end 17:15-17:30: Meeting of facilitators	7:30-8:00: Registration 8:00-9:00: Opening & tea 9:00-10:00: Module 1 <i>Introduction</i> 10:00-12:00: Module 2 <i>Principles of care</i> 12:00-13:00: Lunch 13:00-14:00: Module 2 continued 14:00-15:00: Tour of wards 15:00-15:15: Tea break 15:15-17:15: Video and Module 2 end 17:15-17:30: Meeting of facilitators	7:30-8:00: Registration 8:00-9:00: Opening & tea 9:00-10:00: Module 1 <i>Introduction</i> 10:00-12:00: Module 2 <i>Principles of care</i> 12:00-13:00: Lunch 13:00-15:00: Video and Module 2 continued 15:00-15:15: Tea break 15:15-16:15: Tour of wards 16:15-17:15: Module 2 end 17:15-17:30: Meeting of facilitators
Day 2	7:30-10:00: Module 3 <i>Initial management</i> 10:00-10:15: Tea break 10:15-12:00: Module 3 continued 12:00-13:00: Lunch 13:00-15:00: Video and Module 3 continued 15:00-15:15: Tea break 15:15-16:45: Clinical session 16:45-17:15: Module 3 continued 17:15-17:30: Meeting of facilitators	7:30-10:00: Clinical session 10:00-10:15: Tea break 10:15-12:00: Module 3 <i>Initial management</i> 12:00-13:00: Lunch 13:00-15:00: Video and Module 3 continued 15:00-15:15: Tea break 15:15-17:15: Module 3 continued 17:15-17:30: Meeting of facilitators	7:30-10:00: Module 3 <i>Initial management</i> 10:00-10:15: Tea break 10:15-12:00: Clinical session 12:00-13:00: Lunch 13:00-15:00: Module 3 continued 15:00-15:15: Tea break 15:15-17:15: Video and Module 3 continued 17:15-17:30: Meeting of facilitators	7:30-10:00: Module 3 <i>Initial management</i> 10:00-10:15: Tea break 10:15-12:00: Module 3 continued 12:00-13:00: Lunch 13:00-14:30: Clinical session 14:30-15:00: Module 3 cont. 15:00-15:15: Tea break 15:15-17:15: Video and Module 3 continued 17:15-17:30: Meeting of facilitators
Day 3	7:30-10:00: Module 3 end 10:00-10:15: Tea break 10:15-12:00: Module 4 <i>Feeding</i> 12:00-13:00: Lunch 13:00-14:30: Clinical session 14:30-15:00: Module 4 continued 15:00-15:15: Tea break 15:15-17:15: Module 4 continued 17:15-17:30: Meeting of facilitators	7:30-10:00: Module 3 end 10:00-10:15: Tea break 10:15-12:00: Module 4 <i>Feeding</i> 12:00-13:00: Lunch 13:00-15:00: Module 4 continued 15:00-15:15: Tea break 15:15-16:45: Clinical session 16:45-17:15: Module 4 continued 17:15-17:30: Meeting of facilitators	7:30-10:00: Clinical session 10:00-10:15: Tea break 10:15-12:00: Module 3 end 12:00-13:00: Lunch 13:00-15:00: Module 4 <i>Feeding</i> 15:00-15:15: Tea break 15:15-17:15: Module 4 continued 17:15-17:30: Meeting of facilitators	7:30-10:00: Module 3 end 10:00-10:15: Tea break 10:15-12:00: Clinical session 12:00-13:00: Lunch 13:00-15:00: Module 4 <i>Feeding</i> 15:00-15:15: Tea break 15:15-17:15: Module 4 continued 17:15-17:30: Meeting of facilitators

Schedule for training (continued)

Day	Group I (Doctors)	Group II (Doctors)	Group III (Nurses)	Group IV (Nurses)
Day 4	7:30-10:00: Module 4 continued 10:00-10:15: Tea break 10:15-12:00: Clinical session 12:00-13:00: Lunch 13:00-15:00: Module 4 end 15:00-15:15: Tea break 15:15-17:15: Module 5 Daily Care 17:15-17:30: Meeting of facilitators	7:30-10:00: Module 4 continued 10:00-10:15: Tea break 10:15-12:00: Module 4 end 12:00-13:00: Lunch 13:00-15:00: Clinical session 15:00-15:15: Tea break 15:15-17:15: Module 5 <i>Daily Care</i> 17:15-17:30: Meeting of facilitators	7:30-10:00: Module 4 continued 10:00-10:15: Tea break 10:15-12:00: Module 4 end 12:00-13:00: Lunch 13:00-15:00: Daily Care (Module 5) 15:00-15:15: Tea break 15:15-17:15: Clinical session 17:15-17:30: Meeting of facilitators	7:30-10:30: Clinical session 10:30-10:45: Tea break 10:45-12:00: Module 4 continued 12:00-13:00: Lunch 13:00-15:00: Module 4 end 15:00-15:15: Tea break 15:15-17:15: Module 5 <i>Daily Care</i> 17:15-17:30: Meeting of facilitators
Day 5	7:30-10:00: Clinical session 10:00-10:15: Tea break 10:15-12:00: Module 5 continued 12:00-13:00: Lunch 13:00-15:00: Module 5 end 15:00-15:15: Tea break 15:15-17:15: Module 6 <i>Monitoring & problem solving</i> 17:15-17:30: Meeting of facilitators	7:30-10:00: Module 5 continued 10:00-10:15: Tea break 10:15-12:00: Clinical session 12:00-13:00: Lunch 13:00-15:00: Module 5 end 15:00-15:15: Tea break 15:15-17:15: : Module 6 <i>Monitoring & problem solving</i> 17:15-17:30: Meeting of facilitators	7:30-10:00: Module 5 continued 10:00-10:15: Tea break 10:15-12:00: Module 5 end 12:00-13:00: Lunch 13:00-14:30: Clinical session 14:30-15:00: Module 6 <i>Monitoring & problem solving</i> 15:00-15:15: Tea break 15:15-17:15: Module 6 continued 17:15-17:30: Meeting of facilitators	7:30-10:00: Module 5 continued 10:00-10:15: Tea break 10:15-12:00: Module 5 end 12:00-13:00: Lunch 13:00-15:00: Module 6 <i>Monitoring & problem solving</i> 15:00-15:15: Tea break 15:15-16:45: Clinical session 16:45-17:15: Module 6 continued 17:15-17:30: Meeting of facilitators
Day 6	7:30-10:00: Module 6 end 10:00-10:15: Tea break 10:15-12:00: Video and Module 7 <i>Involving mothers in care</i> 12:00-13:00: Lunch 13:00-14:30: Clinical session 14:30-16:30: Module 7 end 16:30-17:30: Closing ceremony 17:30: Tea break	7:30-10:00: Clinical session 10:00-10:15: Tea break 10:15-12:00: Module 6 end 12:00-13:00: Lunch 13:00-16:30: Video and Module 7 <i>Involving mothers in care</i> 16:30-17:30: Closing ceremony 17:30: Tea break	7:30-10:00: Module 6 end 10:00-10:15: Tea break 10:15-12:00: Clinical session 12:00-13:00: Lunch 13:00-16:30: Video and Module 7 <i>Involving mothers in care</i> 16:30-17:30: Closing ceremony 17:30: Tea break	7:30-10:00: Module 6 end 10:00-10:15: Tea break 10:15-12:00: Video and Module 7 <i>Involving mothers in care</i> 12:00-13:00: Lunch 13:00-14:30: Clinical session 14:30-16:30: Module 7 end 16:30-17:30: Closing ceremony 17:30: Tea break

Table 6. Schedule for clinical instruction. WHO inter-country training workshop on management of severe malnutrition, National Pediatric Hospital, Phnom Penh, November-December 2003

<p>Day 1 Dec 1</p>	<p>11:00-12:00: Tour of wards Observe the admissions area, emergency treatment area, severe malnutrition ward, kitchen, special areas for health education & play</p>	<p>13:00-14: 00: Tour of wards Observe the admissions area, emergency treatment area, severe malnutrition ward, kitchen, special areas for health education & play</p>	<p>14:00-15:00: Tour of wards Observe the admissions area, emergency treatment area, severe malnutrition ward, kitchen, special areas for health education & play</p>	<p>15:15-16:15: Tour of wards Observe the admissions area, emergency treatment area, severe malnutrition ward, kitchen, special areas for health education & play</p>
<p>Day 2</p>	<p>15:15-16:45: Clinical session (Clinical Signs) Observe children with clinical signs of severe malnutrition, identify signs, weigh & measure children, look up weight-for-height SD scores</p>	<p>7:30-10:00: Clinical session (Clinical Signs) Observe children with clinical signs of severe malnutrition, identify signs, weigh & measure children, look up weight-for-height SD scores</p>	<p>10:15-12:00: Clinical session (Clinical Signs) Observe children with clinical signs of severe malnutrition, identify signs, weigh & measure children, look up weight-for-height SD scores</p>	<p>13:00-14:30: Clinical session (Clinical Signs) Observe children with clinical signs of severe malnutrition, identify signs, weigh & measure children, look up weight-for-height SD scores</p>
<p>Day 3</p>	<p>13:00-14:30: Clinical session (Initial Management) Observe initial management of severely malnourished children, identify clinical signs of severe malnutrition, hypoglycemia, hypothermia, shock and dehydration; practise using dextrostix, practise filling a CCP during initial management, assist in taking temperature, treating hypoglycemia, warming the child, giving the first feed</p>	<p>15:15-16:45: Clinical session (Initial Management) Observe initial management of severely malnourished children, identify clinical signs of severe malnutrition, hypoglycemia, hypothermia, shock and dehydration; practise using dextrostix, practise filling a CCP during initial management, assist in taking temperature, treating hypoglycemia, warming the child, giving the first feed</p>	<p>7:30-10:00: Clinical session (Initial Management) Observe initial management of severely malnourished children, identify clinical signs of severe malnutrition, hypoglycemia, hypothermia, shock and dehydration; practise using dextrostix, practise filling a CCP during initial management, assist in taking temperature, treating hypoglycemia, warming the child, giving the first feed</p>	<p>10:15-12:00: Clinical session (Initial Management) Observe initial management of severely malnourished children, identify clinical signs of severe malnutrition, hypoglycemia, hypothermia, shock and dehydration; practise using dextrostix, practise filling a CCP during initial management, assist in taking temperature, treating hypoglycemia, warming the child, giving the first feed</p>

Schedule for clinical instruction (continued)

<p>Day 4</p>	<p>10:15-12:00: Clinical session (ReSoMal & feeding) Identify possible signs of dehydration in a severely malnourished child, measure & give ReSoMal, monitor a child on ResoMal, determine antibiotics and dosages, practise measuring, giving & recording feeds</p>	<p>13:00-15:00: Clinical session (ReSoMal & feeding) Identify possible signs of dehydration in a severely malnourished child, measure & give ReSoMal, monitor a child on ResoMal, determine antibiotics and dosages, practise measuring, giving & recording feeds</p>	<p>15:15-17:15 : Clinical session (ReSoMal & feeding) Identify possible signs of dehydration in a severely malnourished child, measure & give ReSoMal, monitor a child on ResoMal, determine antibiotics and dosages, practise measuring, giving & recording feeds</p>	<p>7:30-10:30: Clinical session (ReSoMal & feeding) Identify possible signs of dehydration in a severely malnourished child, measure & give ReSoMal, monitor a child on ResoMal, determine antibiotics and dosages, practise measuring, giving & recording feeds</p>
<p>Day 5</p>	<p>7:30-10:00: Clinical session (Feeding) Review 24-hour intake charts & plan feeds for the next day, determine if child is ready for F-100, practise measuring, giving & recording feeds, NG feeding</p>	<p>10:15-12:00: Clinical session (Feeding) Review 24-hour intake charts & plan feeds for the next day, determine if child is ready for F-100, practise measuring, giving & recording feeds, NG feeding</p>	<p>13:00-14:30: Clinical session (Feeding) Review 24-hour intake charts & plan feeds for the next day, determine if child is ready for F-100, practise measuring, giving & recording feeds, NG feeding</p>	<p>15:15-16:45: Clinical session (Feeding) Review 24-hour intake charts & plan feeds for the next day, determine if child is ready for F-100, practise measuring, giving & recording feeds, NG feeding</p>
<p>Day 6</p>	<p>13:00-14:30: Clinical session (Daily Care) Measure respiratory & pulse rates, temperature; administer antibiotics, eye drops, multivitamins; change eye pads; weigh child & record weight on daily care page and on weight chart of CCP; assist with bathing children; monitor ward using check list (if time permits)</p>	<p>7:30-10:00: Clinical session (Daily Care) Measure respiratory & pulse rates, temperature; administer antibiotics, eye drops, multivitamins; change eye pads; weigh child & record weight on daily care page and on weight chart of CCP; assist with bathing children; monitor ward using check list (if time permits)</p>	<p>10:15-12:00: Clinical session (Daily Care) Measure respiratory & pulse rates, temperature; administer antibiotics, eye drops, multivitamins; change eye pads; weigh child & record weight on daily care page and on weight chart of CCP; assist with bathing children; monitor ward using check list (if time permits)</p>	<p>13:00-14:30: Clinical session (Daily Care) Measure respiratory & pulse rates, temperature; administer antibiotics, eye drops, multivitamins; change eye pads; weigh child & record weight on daily care page and on weight chart of CCP; assist with bathing children; monitor ward using check list (if time permits)</p>

Table 7. List of participants, resource person and secretariat. WHO inter-country training workshop on management of severe malnutrition, National Pediatric Hospital, Phnom Penh, November-December 2003

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