

# Development of Integrated Management of Childhood Illness (IMCI) in Nepal

*(June 1995 - June 2002)*



*Female Community Health Volunteers*

**Child Health Division, DHS/MoH**

**In collaboration with:**

**WHO, UNICEF, USAID/NFHP**

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# Forward

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Medical Science is ever changing. It tries to explore new horizons incessantly so as to improve the existing health services globally by providing better knowledge and skill to the health workers and medical professionals and the quality care and equity to the people in demand. Integrated Management of Childhood Illness (IMCI) strategy is perhaps one such instrument to reduce the high under five mortality and morbidity in developing countries. The laconic document explains the adaptation process of IMCI in Nepal, its implementation phase, the modification as CB-IMCI during the expansion phase, the innovative ideas included in it gradually, the evolution process of CDD/ARI Programmes and eventually, their merge into IMCI. The involvement of community people from all walk of life and the cost recovery scheme introduced in some of the IMCI districts are unique in Nepal. I hope, this document will be helpful and informative to you all. Your valuable suggestions and comments will be highly appreciated.

Thanks.

Dr. G. P. Ojha  
Director  
Child Health Division

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Thanks.

Dr. Sunlal Thapa  
Chief  
CDD/ARI Section,CHD

# Acronyms/Abbreviation

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AHW	-	Auxiliary Health Worker
ANM	-	Assistant Nurse Midwife
APO	-	Associate Professional Officer
ARI	-	Acute Respiratory Infection
CBAC	-	Community Based ARI/CDD
CB-IMCI	-	Community Based Integrated Management of Childhood Illness
CDD	-	Control of Diarrhoeal Disease
CHD	-	Child Health Division
CHW	-	Community Health Worker
CTEVT-	Council	for Technical Education and Vocational Training
DDC	-	District Development Committee
DHO	-	District Health Office
DPHO	-	District Public Health Officer
FCHV	-	Female Community Health Volunteer
HA	-	Health Assistant
HMG	-	His Majesty's Government
HW	-	Health Worker
IOM	-	Institute of Medicine
JSI	-	John Snow Inc.
MCHW	-	Maternal Child Health Worker
MOH	-	Ministry of Health
MBBS	-	Bachelor of Medicine and Bachelor of Surgery
MS	-	Medical Superintendent
NEPAS	-	Nepal Paediatric Society
NFHP	-	Nepal Family Health Program
NOO	-	National Operation Officer
NTAG	-	Nepali Technical Assistance Group
PHO	-	Public Health Officer
UNICEF	-	United Nations Children's Fund
USAID	-	United States Agency for International Development
VDC	-	Village Development Committee
VHW	-	Village Health Worker
WHO	-	World Health Organization

# Contents

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<b>Preamble</b>	1
<b>Integrated Management of Childhood Illness</b>	3
Rationale	3
<b>Implementation Background of IMCI in Nepal</b>	3
1. Preparatory phase: June 1995-November 1997	3
2. Implementation phase: December 1997-July 1999	5
3. Monitoring and Follow-up Visits After Training	
4. IMCI Evaluation	6
5. Expansion Phase: August 1999 on wards	
6. Community Based IMCI Course	
7. Training Methodology	7
8. IMCI Pre-service Training	9
9. Activities Carried-out in 2001	10
10. IMCI Referral Care Manual	10
11. Evolution Process of Control of Diarrhoeal Diseases and Acute Respiratory Infections (CDD/ARI) Programmes and merging into CB-IMCI	10
12. Some Innovative Ideas Included in CB-IMCI	12
a. Programme Management	12
b. Involvement of Community	12
c. IMCI Register	13
d. Laminated Recording Form	13
e. Cost Recovery Scheme	13
f. DHO/DPHO Capacity Building in Monitoring and Follow-up	13
g. Hiring of NGOs to Conduct Training	13
h. Use of Magic in Creating Awareness	14
13. Development of IMCI Training Packages for Various Categories of Health Workers	14
a. CB-IMCI Package for CHWs	14
b. IMCI Training Package for Nursing Staff	14
c. Supervisory Training Course	14
<b>Problems/Constraints</b>	15
1. Improving the Skill of Health Workers	15
2. Improving the Health System	16
3. Improving Family and Community Practices	16
<b>Lessons Learned</b>	17
<b>Annexes</b>	
I. Related Division/Centres & Organizations for IMCI in Nepal	
II. Adaptation of Training Materials	
III. Details of the Training up to 2000 December	
IV. Results of 3 rounds of Monitoring and Follow-up Visits After The Training in IMCI, Mahottari	
V. IMCI Review Meeting, 17 – 25 September, 1998	
VI. Follow-up After Training Activities	
VII. CB-IMCI Activities Completed in 2001	
VIII. IMCI Training in Nepal Update (up to June, 2002)	
IX. Evolution of CDD/ARI Programme	

## Preamble

There are many ways to death, but there is only one way to be born.

It is said that to be born in this world is a chance but it really needs even more chances for children to survive after birth in countries which they themselves are in the process of surviving in a labyrinthine milieu of socio-economical and political dreads and threats. This is quite known that in developing countries children have to struggle hard for survival right from the birth against many unfavourable and hostile conditions. Nepal, being one of the developing countries with its impertinent poverty, is no exception of this fact. Factors affecting child survival in Nepal may be considered as the outcomes of the complex interplay of illiteracy and poverty which are still dominating the common people of Nepal. The factors affecting child survival may be directly or indirectly related to mothers and to children as well. Other factors such as geographical constraints, inadequate health services at various government health institutions and lack of transport facilities might also be considered to play, to some extent, certain role in facilitating the above mentioned complex interplay.



Nepal has an area of 147,181 sq. kms. Administratively, it is divided into 14 Zones, 5 Development Regions and 75 Districts, Village Development Committee (VDC) being the lowest political unit. The numbers of VDCs are variable from as low as 12 over hundred in a district. There are nine wards in each VDC and a Female Community Health Volunteer (FCHV) is based in each ward.

National census 2001 estimates the population of the country at 23.2 million with a population growth rate of 2.27 in the last decade. Under five years of children constitute 16% of the total population in the country. A preliminary finding of the Demographic Health Survey (DHS, 2001) has estimated the Child Mortality Rate to be 91/1000 and the Infant Mortality Rate to be 64/1000 live births. Although, these indicators have come down over the last a few years, but they are still quite high, compared to those of other SAARC countries or SEARO countries.

99,000 children under the age of five years are estimated to die every year in Nepal. It is estimated that children suffer in an average 5 episodes per child per year from ARI and about 30,000 deaths are due to ARI, in particular Pneumonia. Another 30,000 Children are estimated to die from diarrhoeal dehydration each year and the episode of diarrhoea in an average is 3.3 episodes per child per year (CDD House Hold Survey, 1990). Nearly two thirds of children under the age of three years suffer from moderate or severe undernutrition. Many infants 0-4 months of age are not exclusively breastfed, which often leads to diarrhoea and thus contributes to undernutrition. Approximately, 0.5 percent of children under three years suffer from night blindness. Only 45% of children have received complete vaccinations against six common vaccine preventable childhood diseases and about 20% have received none. National measles

prevalence rate is 11 percent (*Source: Children and women in Nepal: A situation analysis, 1996, National Planning commission HMG/UNICEF.*

Two decades ago, this picture was even worse.

Recognizing the magnitude of problems related to morbidity and mortality in children of under five years of age in Nepal, HMG, Ministry of Health started child survival interventions through various priority based programmes such as EPI, Nutrition, Control of Diarrhoeal Diseases and Acute Respiratory infections programmes. Although, these interventions have certainly brought some improvement in the health predicament of under five children, but the progress is not as good as was expected. The status quo remains not much drastically changed. Disease specific programmes probably led to frequent travelling of health workers for training and wastage of time and energy thereby and inadequate supervision and monitoring and specific disease related services at a time, resulting in inappropriate disease management.

Still five major illnesses e.g. pneumonia, diarrhoea, undernutrition, measles and malaria waylay for favourable conditions to kill under five years of children and they account for 70% of the total deaths. There is still no absolute intrepid atmosphere for these children from these killer diseases in developing countries.

## Integrated Management of Childhood Illness (IMCI)

### Rationale

Integrated management of childhood illness strategy, initiated by WHO/UNICEF tries to address these five major killer diseases in a holistic way. The main objective of the IMCI strategy is not to leave any underlying disease undetected, which may prove to be fatal, when a child is brought to a health facility with signs and symptoms of an apparent disease, which health workers mostly pay attention to, and miss other underlying causes. In other words, a single diagnosis in a sick child with an apparent disease sometimes may not be adequate. It is believed that IMCI is one of the 10 most cost effective interventions, although the initial investment may be expensive. It can avert about 14% health burden (World Bank Report 1993 investing on health). Moreover IMCI has equal emphasis on both curative and preventive aspects. It addresses 3 main sensible issues of health system which can help strengthen the health delivery services at the health facility as well as at the community level:

- i. Improving the skill of the health workers
- ii. Improving the health system
- iii. Improving the family and community practices.

### Implementation Background of IMCI in Nepal

#### 1. Preparatory phase : June 1995 - November, 1997

- a. IMCI was introduced in Nepal in June 1995 through an orientation meeting with the help of WHO consultants from Geneva and SEARO/Delhi. In this meeting, policy makers, senior paediatricians, directors of various divisions and centres and representatives from donor communities and INGOs were invited. The consensus of the meeting was to implement IMCI in Nepal.
- b. After the orientation meeting, Child Health Division was identified as a focal point and an IMCI working group was formed under the chairmanship of the Director, Child Health Division and members consisted of Section Chiefs and programme personnel from National Health Training Centre, Child Health Division, Epidemiology and Disease Control Division, Logistic Management Division, Planning and Foreign Aid Division, National Health Education Information and Communication Centre, Paediatricians from Institute of Medicine (IOM) and Kanti Children Hospital and Representatives from WHO, UNICEF and USAID JSI (now NFHP). (*See annex I*)

#### Terms of reference of this IMCI working group were:

- To get approval of IMCI from Ministry of Health for implementation in Nepal.
  - To identify the implementation districts.
  - To do adaptation and translation of WHO generic training materials into Nepali.
  - To plan and manage the training activities during early implementation phase.
- c. The IMCI working group identified 5 potential districts and decided to select 2 implementation districts out of them. For the selection purpose, some criteria were set by the working group e.g. big districts with large number of under five population, easily accessible to implement, monitor and supervise, having good

communication means and electrical supply, committed DHO and PHO etc. The members of the working group made teams to visit all of those five districts and visited them one by one in 1995. Information were collected and analyzed and were presented in a debriefing meeting of the working group. The consensus of the meeting was to select Mahottari district from plain area and Gorkha district from hilly area out of the five potential districts as pilot districts.

- d. Nutritional studies were then conducted in those two districts to gather information on knowledge, attitude and practice of feeding of under five children as well as the terminology of locally available foods used by the mothers/caretakers. These information were incorporated into the training materials during adaptation.
- e. Adaptation work of WHO generic training materials was started in May 1996 and completed in February 1997 with the help of WHO consultants, which took 10 months for the completion (*see Annex II*). Similarly translation into Nepali was started in June 1997 and was over by December 1997. It took another 7 months to complete the translation. The translation task was assigned to Health Learning Materials Centre, IOM, Maharajgunj.
- f. After the adaptation of WHO generic materials to the Nepali context, one Inter-country Training Course in IMCI was conducted in August 1997 in Nepal in which 8 Nepali participants were trained to be used as facilitators in district level trainings in the selected districts. (*See Annex III*)



*1st. Inter-country Training Course, 1997*

- g. Immediately, one National Training Course in Nepali was also conducted from 10-20 November, 1997 and the translated materials were field-tested and corrections were made accordingly. 7 participants from 2 implementation districts were also trained and rest of the participants were from Kanti Children Hospital and related divisions and centres. (*See Annex III*)

## **2. Implementation Phase: December 1997 - July 1999**

- a. Thereafter, 3 district level trainings were conducted in one of the selected districts, *Mahottari* in 1997-1998 in which 46 health workers, who were doctors, Health Assistants, Auxiliary Health Workers and Auxiliary Nurse Mid Wives were trained.

(See Annex III) Training could not be conducted in another district due to some unavoidable reasons.

- b. In 1998 one ToT Course for Basic Health Workers, one Facilitators Training Course and one second Inter-country Training Course were also conducted. (See Annex III)
- c. Third Inter-country Training Course was conducted in September 1999.

### **3. Monitoring and follow up visits after training**

3 rounds of monitoring and follow up visits were also conducted in *Mahottari* district in the same year within 6 weeks after the training as far as possible. First monitoring and follow up visit after training was conducted with the help of the WHO consultants from WHO/HQ and SEARO in Mahottari. The duration was of 5 days as per WHO guidelines. During first 2 days orientation was given to central level 3 persons, 3 paediatricians and 4 DHO staff (DHO, MS, PHO and CDD/ARI focal person) about the assessment of IMCI trained health workers, health facility support and checklists. For half day, they were taken to the district hospital and were asked to fill up the checklists and identify the possible problems. For remaining half day, participants were taught as to how the plan for health facility visits should be made and how the supervisors should be grouped for the visits. Remaining 2 days were spent for field visits. Each group of the supervisors was accompanied by one facilitator from WHO/HQ/SEARO. The supervisors were asked to reinforce the skill of the IMCI trained health workers after observing the case assessment by them in the health facilities and they were also asked to list the problems faced by the health workers and organize a meeting with the technical staff in each health facility and solve those problems. Unsolved problems were asked to refer to the district health office to be discussed with DHO staff and health post incharges on the last day in the debriefing meeting. After the assessment of health workers, an exit interview with mothers/care takers who came with sick children was also taken by the supervisors regarding knowledge attitude and practice of the mothers/caretakers. During last day, the findings collected from the field visits were presented before the health post incharges, problems were discussed and possible solutions were found out in the district health office. Unsolved problems were referred to the centre and region.

Thereafter 2 rounds of follow up visits in *Bardiya* district and one round in *Nawalparasi* district were conducted by CDD/ARI Section with the help of IMCI trained paediatricians and WHO/CDD/ARI staff following the same WHO guidelines. Surprisingly, more than 70% of the problems were solved in the health facilities and rests of them were solved in the district health office. Only a few problems were referred to the centre, which were mostly related to the National policy or protocol. The first follow up visit in *Mahottari* district revealed that the case management skill and knowledge and health facility support was very poor but during the subsequent 2 visits it showed some improvement. It indicates that the health workers after the training need regular monitoring and supportive supervision. The most disturbing reason for lack of motivation among health workers probably was the frequent transfer of the trained health workers. (See Annex IV)

The results of the follow up visit in comparison with the first follow up of *Mahottari* district is given in Annex VI.

### **4. IMCI Evaluation**

In September 1998, 5 days evaluation meeting was organized with the help of WHO consultants and this evaluation meeting made major recommendations to improve IMCI strategy for future expansion. (See Annex V)

## **5. Expansion Phase: August 1999 onwards**

The IMCI Working Group after a series of meetings decided to expand IMCI in 3 districts with the name of Community Based IMCI (CB-IMCI). *Nawalparasi*, *Bardiya* and *Kanchanpur* districts were selected based on the criteria set by the IMCI Review Meeting 1998 and the time period to complete the training activities was from 15th July, 1999 to 14<sup>th</sup> July, 2000. Makwanpur district recommended by the IMCI Review Meeting, was dropped because, being a hilly district it was felt that it would be difficult to do the monitoring and follow-up visit after the training. More over ARI Strengthening Programme was already functional in this district.

## **6. Community Based IMCI Course**

11 day IMCI course did not have the Programme Management Component. IMCI working Group thought that without this component, the health workers would face problems in managing the programme in their health facilities when they go back after the IMCI training. Therefore, the 11 day IMCI Training Course was modified as follows:

- a. Duration of the course was reduced from 11 days to 9 days.
- b. Name of the course was called CB-IMCI and 2 days were added for the programme management component. It includes :
  - Community level trainings
  - Supervision/monitoring at community level
  - Recording/reporting and
  - Logistic management and supply at community level
  - Orientation of DDC/VDC members, mothers' groups and traditional healers
- c. Clinical session started from 3<sup>rd</sup> day and continued till the 9<sup>th</sup> day. Total duration was 7 days in indoor and outdoor patient departments.
- d. All the modules were completed by 9<sup>th</sup> day of the training and home works were not given except in some batches, where follow up module was asked to read at home and finish the exercise on the next (last) day of the training
- e. Demonstration role plays were mostly not done, demonstration on ORS preparation was deleted, rest of the exercises, role plays, group discussions, video exercises were done completely.

It also did not have the community component and our experience in Nepal tells us that without community involvement no programme is going to work at health facility level alone to reduce the morbidity and mortality among <5 children. Therefore, the 5 day IMCI condensed course for Basic Health Workers (Community Health workers in Nepal) developed by WHO, SEARO/CARE, INDIA was adapted into the Nepal context and translated into Nepali. The working group decided that for Female Community Health Volunteers (FCHVs) the same existing Community Based ARI/CDD (CBAC) training materials (combined) should be used for the time

being because it may need special effort and considerable time to develop IMCI training materials to be used by FCHVs as most of them are illiterate (around 50%).

## **7. Training Methodology**

### **a. District Planning and DDC Orientation - 2 days**

To begin with, 2 days District Level Planning and District Development Committee (DDC) members Orientation Meetings are organized. During this 2 day meeting District Health Management Team is actively involved in detailed planning of different levels of trainings in the district. DDC members are oriented during half day meeting about the programme and the support for it with especial emphasis on the sustainability.

### **b. District Level Training - 9+2 days**

9 day IMCI and 2 day programme management training is provided to Doctors, DPHO/PHO, HAs, AHWs and ANMs working in the district. To train the district level and downwards trainings, a core of trainers is produced through one Training of Trainers (ToT) Course (now-a-days district level training is conducted by NEPAS).

### **c. Community Health Workers Level Training - 5+2 days**

Thereafter, Community Health Workers (VHWs and MCHWs) Level Training is conducted with the help of DHO and JSI staff (now this training is being conducted by NTAG). CHWs are also provided 5 day condensed IMCI and 2 days Programme Management Course. Programme Management Course is very much essential for them, because, they are the immediate supervisors of FCHVs.



*FCHV Level Training*

### **d. FCHV Level Training - 5+2 days**

After the Community Health Workers Level Training is over, FCHVs are trained in 2 phases.

#### **First phase - 3½ days**

FCHVs are intensively trained for 3½ days only in ARI to assess and identify Pneumonia. This is necessary because most of them are illiterate and they are provided with Cotrimoxazole to treat Pneumonia in the community.

**VDC Orientation - ½ day**

VDC members and Female Ward Members are invited for the ½ day of the fourth day training of FCHVs in which FCHVs are also present. They get introduced to each other in this meeting. VDC Members are oriented about the programme and the support they could provide to it with more emphasis on the sustainability at local level.

**Mothers' Group Meeting - 1 day**

The mothers' group orientation meeting differs from the existing mother's group meeting according to HMG policy which is supposed to take place every month under the supervision of a VHW. In this mothers' group orientation meeting, FCHV is asked to gather the mothers of under five children suffering from ARI in her ward under the supervision of a VHW. The FCHV informs the mothers that she has learnt to identify Pneumonia with the help of Sound Timer and she can treat the sick children with Cotrimoxazole in the community. During this session she does assessment of sick children suffering from cough and treats the pneumonia cases and refers the severe cases to the nearest health facility. This orientation meeting is monitored by the District Health Office Staff.

**Second Phase Training - 2 days**

All trained FCHVs and VHWs/MCHWs are called for the Second Phase Training 2-3 months later. First of all, ARI is reviewed and feedback is given wherever necessary and then training is provided on diarrhoea, nutrition, and immunization.

**e. Traditional Healers' Orientation - 1 day**

Traditional Healers are still very much influencing persons in the community in Nepal and they often make the mothers linger around them with the sick children. This makes delay in timely referral and many children die without medical care. Therefore, to make the referral system timely and effective, the Traditional Healers are oriented about the danger signs of Pneumonia and Diarrhoea to refer urgently to the health facility. They are provided with Blue plastic cup for measuring the water to prepare ORS, along with 5 packets of ORS and mothers' booklet as a training material.

**f. Orientation Training of Drug sellers - 1 day**

This is another important category of community people, whom most of the mothers approach with their sick children. They also make delay in referral of needy sick children and they also use drugs and antibiotics irrationally. Therefore, they are oriented about Diarrhoea and ARI with special focus on timely referral of severe cases and rationale use of drugs for 1 day.

Although, the 11 day IMCI course was reduced to 9 days, the quality of case management of the health workers in *Nawalparasi* did not seem less better than those of *Mahottari* district. The health facility support was also satisfactory in Nawalparasi.

## **8. IMCI Pre-service Training**

- a. In service training is expensive, time consuming and slow where as IMCI pre-service training can be less expensive and can have wider coverage and it can make the in-service training simpler for the health workers when they join HMG service by providing orientation, if IMCI is introduced in the curriculum of medical colleges and paramedical schools. Keeping this fact in mind, WHO has suggested that IMCI should be introduced in the medical colleges and paramedical schools.

In Nepal IMCI was introduced in the Institute Of Medicine in 1999 and Dr. P. R Sharma (Associate Professor) was appointed as the focal person for IMCI. Since then it is being taught in the MBBS course after incorporating IMCI in the curriculum.

Thereafter, a consultative meeting of Teaching Staff of Medical Colleges was organized on 8 and 9 March, 2001 in which Deans/Principals and Heads of the Department of Paediatrics of 6 medical colleges from all over Nepal were invited and they were oriented on IMCI in Nepal. Feasibility of IMCI pre-service training in the medical colleges was in particular discussed. All faculty members enthusiastically agreed to include IMCI in the curriculum of the MBBS course of the medical colleges. They requested Child Health Division to train 2 consultants from Department of Paediatrics in the 11 day IMCI and 2 focal persons in the 5 days orientation course from each of the medical colleges. Such two courses were conducted in September and October 2001 respectively for them. Some of these colleges are in the process of starting pre-service IMCI.

- b. Similarly, one day consultative meeting with the teaching staff of Paramedical schools (CTEVT & Nursing Campus) was also organized in July 2001 to discuss the possibility of IMCI pre-service training. The teaching staff agreed on introducing IMCI in the paramedical schools and requested Child Health Division to conduct a two day workshop for them to facilitate the development of curriculum with the help from IOM to be incorporated in the teaching course of the schools. The workshop was organized in December 2001 in which the curricula for pre-service IMCI were developed for three different categories e.g. Proficiency Certificate Level (for staff nurses) Proficiency Certificate Level (for Health Assistants) and for Auxiliary Health Workers and Auxiliary Nurse Midwives. In the workshop it was also decided that at least 40 teaching staff of the paramedical schools will be trained in IMCI in 2002 by Child Health Division who will later facilitate the IMCI pre-service training in the paramedical schools.

## **9. Activities Carried-out in 2001**

CB - IMCI was expanded to three districts Dhanusha, Rupandehi and Kaski. Sub Health Post Level Training's were conducted in the pilot district Mahottari. Three batches of training were conducted in Bardiya, Nawalparasi and Kanchanpur for newly appointed or

transferred health workers. Remaining one round of Monitoring and Follow up visit was completed in Nawalparasi district and 3 rounds of follow-ups were carried out in Dhanusha. In addition to this one Inter-country training for Indonesians and SEARO country participants, orientation of Drug Sellers of Bardiya district, Community Health Workers Level Training for 2 batches in Dhanusha were also conducted in 2001. (*See annex VII*).

#### **10. IMCI Referral Care Manual**

Referral Care Manual was developed by WHO/HQ to train the district hospital staff managing under five sick children including referred cases from the health facilities in the district. This manual is consistent with the IMCI guidelines. An orientation meeting about the referral care manual was conducted on 26 December 2001 for IMCI districts' medical superintendents and paediatricians of Kanti Children Hospital. The manual seems to be very useful and it will be introduced in all IMCI districts in near future.

#### **11. Evolution Process of Control of Diarrhoeal Diseases and Acute Respiratory Infections (CDD/ARI) programmes and merging into CB-IMCI**

CDD Programme was started in 1983 as a priority based child survival intervention for under five children in Nepal. When it was functional throughout the country, CDD Reactivation process was started in 1993 in a region wise basis according to the recommendation made by the CDD comprehensive Review Meeting of 1991. Later on it was realized that without community health workers and community people involvement expected outcomes could not be achieved. So it was decided to involve them as well.

ARI control programme was started in 1987 also as a priority based programme for the same under five children under the same CDD section. Evaluation of ARI programme revealed that the impact was not as good as was expected, especially at the community level. Programme personnel and Donor agencies, therefore, decided to implement ARI strengthening activities in 4 districts in 1995 as a community level ARI intervention on an experimental basis to provide maximum ARI related services in the community by involving Community Health Workers (VHWs and MCHWs) and FCHVs. Two models were introduced. In two districts, CHWs and FCHVs were trained to diagnose Pneumonia by counting respiratory rate with the help of a sound timer and to refer to the nearest health facilities for the necessary treatment (Referral Model) where as in the remaining two districts they were trained to diagnose and treat pneumonia with Cotrimoxazole Paediatric tablet and refer the severe Pneumonia cases and very severe diseases to the health facilities (Treatment Model). Close and intensive monitoring and supervisions were also done after the training. An evaluation of this intervention in 1997 revealed four important things:

- a. Treatment Model was more effective and popular in the community
- b. CHWs/FCHVs treated twice the number of pneumonia cases than the health workers treated in the health facilities.
- c. Knowledge and skill of the FCHVs were very good.
- d. Over use of Cotrimoxazole was very negligible (2.6%)

A debriefing meeting with the high level policy makers and professionals recommended that the intervention should be expanded to other districts gradually and the Treatment Model only should be applied to reduce the pneumonia mortality among under five children.

In 1997-1998, community level ARI intervention was combined with CDD because the strategies of both the programmes were aiming at the community and both the programmes were being run by the same personnel. It was renamed as CBAC and it was implemented in 6 districts and referral model districts were converted into treatment districts.

In 1998-1999, two more components Nutrition and Immunization were also combined with CBAC programme while expanding it in other five districts.

After implementing IMCI in Mahottari, the pilot district, IMCI working group decided that it should be extended to the community as well. Therefore, the 11 day IMCI course was reduced to 9 days and community and programme management components were added to it. It was renamed as community based IMCI. Then, the CBAC programme was merged into CB-IMCI and was implemented in 3 districts in 1999-2000. *(Please see annex III)*

## **12. Some innovative ideas included in CB-IMCI**

### **a. Programme Management**

The IMCI working group felt it necessary that the health workers after getting the IMCI training should also know how to manage the programme in their health facilities in terms of recording/reporting, supervision/monitoring and logistic management with the limited local resources. For this purpose, 2 days programme management training has been included which is lacking in the 11 day IMCI course designed by WHO/UNICEF. We hope, this will certainly improve the performance of the trained health workers making them more competent in the management of the daily task and will also improve the health system. To provide program management training to health workers a 2 days training module and facilitator's guide have been developed.

### **b. Involvement of community**



*Mother's Group Meeting*

Our past experience showed that infant and under five mortality can only be reduced substantially if child survival interventions are extended to the community because not more than 20% mothers/caretakers come to the health facilities in search of medical care and most of the under five children die in the communities. Therefore, the community health workers and female community health volunteers are included in IMCI and trained to recognize diarrhoea and pneumonia and treat them accordingly in the community and provide counselling on breast feeding, nutrition and immunization.

Drug sellers are also oriented for one day about Diarrhoea and ARI with especial emphasis on rational use of antibiotics and drugs and appropriate and timely referral of sick under five children in the community. Most of the mothers/caretakers first bring their sick children to the drug sellers because they are close and are available at any time.

Similarly, traditional healers are also oriented on Diarrhoea and ARI for one day to refer children timely to the nearest health facilities who need urgent medical care. These traditional healers are still very much influential in the community.

These two categories of community people can make the referral system timely and effective.

**c. IMCI Register**

The trained health workers were practicing IMCI but they were not making any record of the assessed under five sick children in the register. The general register was not compatible.

Therefore, we have developed an IMCI Register, which is consistent with the IMCI recording form. The IMCI register is being used in the IMCI districts by all the trained health workers.

**d. Laminated Recording Form**

Because of the limited budget and expansion of IMCI in more and more districts, it is not possible to supply recording forms to all IMCI districts to be used while assessing the sick children. To address this problem, we have made laminated recording forms, which can be reused as a recording form or can be used as a reference guide to follow the steps systematically in assessing sick children.

**e. Cost Recovery Scheme**

Programmes in Nepal are mostly donor dependent and when they withdraw the financial support after implementation, these programmes do not survive. To make the programme sustainable on its own, cost recovery scheme has been introduced in some IMCI districts in which FCHVs charge for the drugs and in some districts there are endowment funds provided by the VDCs. The results are encouraging and it should be replicated in all IMCI districts.

**f. DHO/DPHO capacity building in monitoring and follow up**

Keeping in mind the shortage of manpower in the centre, during the first round of follow up a good number of supervisors and health facility incharges are trained in monitoring and follow up visit.

The first follow up is conducted by the central level staff and the subsequent follow ups are conducted by the trained district supervisors. This way, the load on the central staff can be averted very much.

**g. Hiring of NGOs to conduct training**

Because of shortage of manpower in the centre and slow expansion of CB-IMCI in Nepal, the IMCI working group decided to hire competent NGOs both for health facility and community level training activities. For health facility level training, Nepal Paediatric Society (NEPAS) was selected. This NGO had some paediatrician members who had already worked as National and International facilitators for IMCI in Nepal and in SEARO countries. The second NGO was Nepali Technical Assistance Group (NTAG) which was selected for the community level training and it had been conducting the community level orientation and training in Nepal very effectively for Vitamin 'A' programme for many years. CB-IMCI is getting services from these two NGOs since 2001.

**h. Use of magic in creating awareness**

To create awareness and demand about ARI and Pneumonia and its services in the community, two groups of magicians are being used during the training of FCHVs in the training sites, preferably in schools, so that school children could also be oriented about the fatal result of pneumonia if not treated in time and at the end of the magic show, the students are made committed to convey the message at least to five children by each student.

**13. Development of IMCI training packages for various categories of health workers**

**a. CB-IMCI Package for CHWs**

Basic Health Workers' IMCI package developed by WHO SEARO/CARE INDIA was adapted for Nepal and was translated into Nepali. It is a 5 day IMCI course and is in use in Nepal.

**b. IMCI Training Package for Nursing Staff**

This is a 5 day IMCI package developed for nursing staff working in the hospitals and not managing <5 sick children. This course focuses mainly on counselling related to home care, nutrition and breastfeeding. Five modules Introduction, Assess and Classify Children 2 Months to 5 Years, Treat the Child, Counsel the Mothers and Assess and Classify Young Infants Age 1 Week to 2 Months are included. In the last module 3 Chapters - "How Breastfeeding Works, Not Enough Milk, and Sustaining Breastfeeding" are added which will provide knowledge to nursing staff to promote breastfeeding and make it more effective.

**c. Supervisory Training Course**

This is also a five day package developed for those health workers who do not manage <5 children in the health facilities but are responsible for the monitoring and supervision of health facilities and health workers in the district. In this course there is no clinical practice but one day, they are taken to a health facility to show them how the health workers assess and manage the sick children according to IMCI guidelines and also they are instructed how to supervise the health facility. If possible they are also shown the sick children and important signs of diseases. There is only one module condensed from the seven IMCI modules and Chart booklet without exercises and most of the role plays. Video and photograph exercises are kept as it is.

## **Problems/Constraints**

The problems identified during implementation and expansion phase can be divided under each component of IMCI. These problems can be summarized as follows along with suggestions:

### **1. Improving the skill of health workers**

- a. The cascade training process from district downwards at various level is difficult. The identified trainers in the district health facilities, get transferred or get engaged in other programmes or attend other trainings or can not stay long out of their health facilities during the time period when they are needed for IMCI training. Sometimes the quality of training is in doubt owing to inefficient facilitators.
  - A new training strategy has to be identified like hiring a private organization to take care of the trainings especially in the CHWs and FCHVs Level as they are trained in several batches simultaneously.
  - To maintain the consistency and to improve the quality of the training 2 days facilitators' orientation should be organized prior to each trainings.
- b. Follow up visit after the training of Sub Health Post staff is very time consuming because of huge number and the Sub Health Posts are located far off from the District Health Office and some of them are geographically difficult to reach.
  - Number of days for follow up should be increased or more supervisors should be trained in follow up.
  - More responsibility should be given to DHO staff in conducting follow-up visit.
- c. Inadequate supervision and monitoring from district downwards.
  - The district management team and health workers working in the health facilities should be motivated and guided through regular supervision and support from centre.
  - Regional Health Directorate should also take responsibility in supporting the district.
  - District Health Office should take over all responsibility and ownership and should do regular monitoring and supervision of the health facilities.
  - DDCs/VDCs should also take the ownership and responsibility of the programme and motivate and support the health workers.

### **2. Improving the health system**

- a. Several IMCI drugs which are included in the Essential Drug List (EDL) are not supplied by the Government.
  - While expanding IMCI to new districts consideration should be given to those districts where Community Drug Programme (CDP) is already implemented.
  - Orient the Logistic Management Division in the importance of IMCI drug supply and maintain strong co-ordination.
  - Drug supply and management course should be introduced in Nepal.
- b. Difficulty of sustainability of the IMCI Programme in general.
  - Cost recovery scheme should be introduced in IMCI districts.
  - Health Post and Sub Health Post management committee should be reactivated.
  - Village Development Committees should be oriented and actively involved in the programme.

### **3. Improving family and community practices**

- In most of the districts mothers groups are not meeting regularly.
- FCHVs would like to receive some kind of incentive.
- Resources to carry out the baseline survey have not yet been allocated.
- A lot of MCHWs posts are vacant.
- Try different strategies on how to reach the community in different districts.
- Orientation and involvement of Traditional Healers, Drug sellers, Primary School Teachers and students and Mothers' Groups could be potential resource in reaching the communities and families.
- DDCs and VDCs should be briefed and encouraged in taking ownership in the community including filling up the vacant posts in their DDCs/VDCs.

## **Lessons learned**

### **1. Functional Working Group Included members from:**

- Child Health Division
- Related Divisions/Sections
- Donor Agencies/INGOs Partners

Helped a lot for providing guidance in terms of adaptation of trainings materials, planning activities, implementation, identification of resources, modification of strategies, etc.

### **2. Well planned training activities**

- Involvement of DHO staff
- Avoid overlapping of activities
- Accurate time frame
- District ownership and commitment

Helped conduct training activities smoothly and timely.

### **3. Extension of IMCI to the community and community participation such as;**

- DDC members
- VDC members
- FCHVs
- Drug Sellers
- Traditional Healers

Provided community commitment and sustainability at local level in some districts.

### **4. Quality of training was maintained with**

- Training site with enough <5 sick children flow
- Comfortable and spacious Hall for class room work
- No. of participants upto maximum 20/batch was suitable
- Facilitators: Participants ratio 1:3-4 was good

### **5 Monitoring/Follow-up visit to**

All trained HWs and HFs was useful

- To reinforce knowledge/skill
- To improve Health System by supporting HFs through identifying problems and solving them, then and there
- To stress on particular topics in future training

It motivated the health workers and made them committed to work in the health facilities.

### **6. Improved referral mechanism through**

- Traditional Healers
- Community Health Workers
- Drug Sellers
- FCHVs

after providing them training/orientation in CB-IMCI.

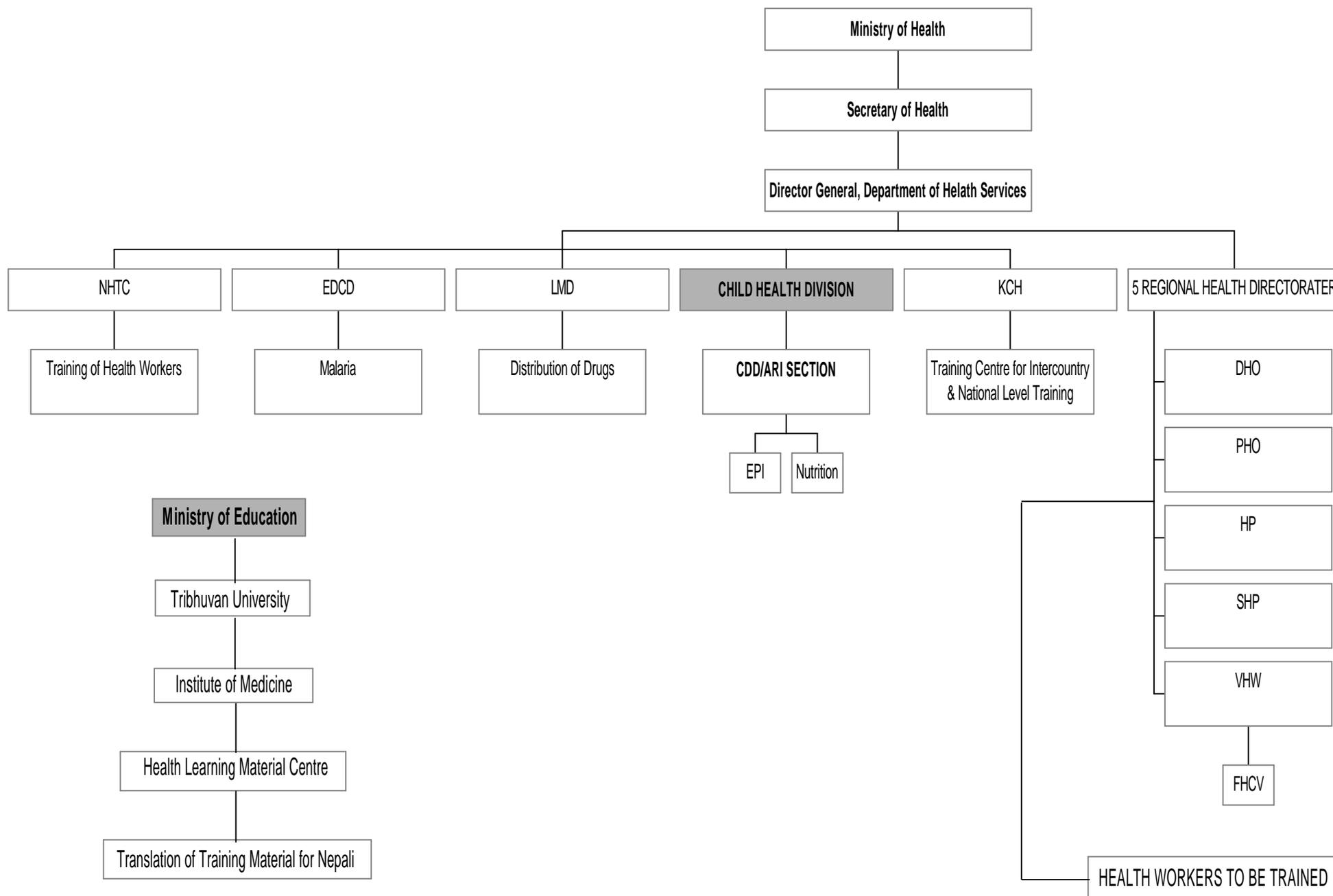
- 7. Capacity building of DHO/DPHO provided assistance to training, monitoring/follow-up visits and supervision**
- 8. Mechanism for sustainability of the programme introduced to some districts helped in making drugs available with FCHVs**
- 9. Collaboration/Co-ordination with major INGOs/Local NGOs helped for**
  - Rapid expansion in other districts
  - Monitoring/supervision
  - Evaluation/research/studies
  - Timely reporting
- 10. Review Monitoring Meeting yearly at district and community level helped improve the quality of case management, contents updating in the training materials, supervision and monitoring, recording and reporting and logistics management.**

#### **Donor Agencies/Partners**

WHO  
UNICEF  
USAID/NFHP  
JICA  
PLAN International  
CARE Nepal  
Save The Children US  
ADRA  
AusAID

# RELATED DIVISION/CENTRES & ORGANIZATIONS FOR IMCI IN NEPAL

Annex - I



***Annex-II***

## **ADAPTATION OF TRAINING MATERIALS**

Adaptation was started on 16-17 May, 1996, through a consultative meeting where WHO consultants Dr. G. Hirschall WHO/Geneva and Dr. Vijay Kumar WHO/SEARO came to facilitate it. Adaptation was done as per WHO Adaptation Guidelines which included review of Case Management Guidelines and National Policies, finalization of guidelines, making changes in chart-booklet and finally incorporation of guidelines in the modules.

First of all, areas where adaptation is required were identified in the perspectives of epidemiological importance, compatibility with existing situation of the country, communication with caretakers, use of local terms, recommendation of adequate foods/fluids (including breast feeding), choice of antibiotics and antimalarias, eating habit and locally available foods, management of fever in areas of no malaria, Nutrition (including Vit. 'A' and Mebendazole) and Immunization Schedules.

Then areas where adaptation is not required were also discussed which included diarrhoeal diseases and ARI where management guidelines were in line with that of the IMCI.

Later, the adaptation subgroup finalized the adaptation and the document was circulated to the concerned authorities (MOH, Divisions/Centres, Paediatricians, Donor representatives etc.) for their comments/suggestions.

In the meantime, 2 Nutrition studies were conducted in Mahottari (Terai area) and Gorkha (Hilly area) districts regarding the local foods availability, terminology and feeding habits in the locality along with the problems and constraints of the mothers. Dr. J. Martinej consultant from WHO/Geneva came to Nepal to assist in the preparation of the Nutrition study.

Within the prescribed time frame the circulated documents with the comments were obtained and it was finalized and a consensus meeting for the adaptation was organized on 22-23 November, 1996 with the help of Dr. Vijay Kumar from SEARO. The finalized adaptation version was discussed in this meeting. Later, forms containing questionnaire to summarize what clinical adaptations are required, were distributed to all the facilitators and participants to get the consensus. All questions were discussed one by one. Many of the articles were agreed without any objection from the group, some were agreed after modification and a few articles were disagreeable and changed for consensus.

The finalized documented adaptation was sent to Dr. J. Martinej, Geneva who incorporated the adapted materials into the chart-booklet and modules and later sent the diskettes to Nepal.

**Annex-II**

## **ADAPTATION OF MATERIALS**

**Coordinator:** Dr. Neena Khadka, M.O., NHTC

**Participants of working group for adaptation of materials:**

Dr. R. P. B. Shrestha	- Paediatrician KCH
Dr. S. L. Thapa	- Chief, CDD/ARI Section, CHD
Ms. Pushpa Acharya	- Nutritionist, Nutrition Section
Mr. Rajendra Karki	- Training Officer, CDD/ARI Section
Dr. J. Luna	- WHO

**Resource persons for adaptation of materials:**

Dr. MK Banerjee, Epidemiology Division
Mr. K. Lamichhane, JSI
Dr. G. Ojha, Chief EPI Section, CHD

**Major areas for adaptation:**

### **ARI**

Cotrimoxazole as first line of drug in ARI was agreed upon till further studies prove otherwise.

### **CDD**

Emphasis was to be put on advice on intake of plain water along with ORS and continued breast feeding for children less than six months of age. This was in response to the concern raised for the treatment of diarrhoea with the same concentration of ORS in babies less than six months of age. Since it was decided that different dilutions of ORS could produce confusions in health workers it was agreed that the same dilution with emphasis on intake of plain water and breast milk was to be advocated.

### **Shigella dysentery**

Gentamycin was discussed to be more useful as a second line of drug, especially in epidemic situations. It was hence suggested that the CDD programme should initiate studies to identify the sensitivity of shigella dysentery in Nepal. For the time being, Cotrimoxazole would be given as the first line of treatment followed by Nalidixic acid. It was also suggested to find out the sensitivity pattern of shigella dysentery in districts in which the IMCI is to be launched.

The following suggestions came up

- Include box for no risk areas in the country.
- Possibility of giving Quinine IM at health posts.
- Use of Cotrimoxazole for conditions where Pneumonia and Malaria and both suspected to be present.

### **Vitamin 'A'**

The core group decided not to use sick child visit for updating Vitamin 'A' supplementation. It was decided to use sick child visits at the health facilities to supplement with Vitamin 'A' only in case of Xerophthalmia, Malnutrition and Measles. For children under 6 months of age, considering the fact that Measles does not usually occur and Night Blindness would not be detectable, then only severe malnutrition would be the indication for Vitamin 'A' supplementation. Discussions on the side effects of Vitamin 'A' and potentially toxic drugs if misused were done. Also the protocol of cutting the capsule to give half the Vitamin dose to children less than six months was not seen to be a good method.

### **Mebendazole**

Mebendazole was to be advised in the following conditions only.

- Areas where worms are a problem
- Children more than two years of age
- Children who had not received Mebendazole in the last 6 months
- Only recommended in children with severe malnutrition
- Recommended to treat malnutrition and anemia

It was decided to review the present policy and change it to the above if necessary.

### **Modification of IMCI Modules - May 1998**

IMCI Working group made changes in the following areas.

- i. Exclusive breastfeeding age was changed up to 5 months from 4-6 months range as per National Nutrition Policy. Now it has been changed to 6 months.
- ii. **Food box:** 4 columns were made instead of 5 columns.
- iii. **Vitamin 'A':** Vitamin 'A' was added in the treatment of persistent Diarrhoea.
- iv. Mebendazole was replaced by Albendazole because single dose of Mebendazole was not available in Nepal.

### Details of the training up to 2000 December Inter-country and National Level Training

Course	Date	Total No. Participants	Total No. of facilitators	No. of Participants from Nepal				
				Pediatr.	M.O.	P.H.O.	USAID \UN	Total
Inter-country 1st.	4 -15 Aug. 1997	26	4	7		1	4	12
Inter-country 2nd	25 Oct.-Nov. 6 1998	26	11 <i>4 from Nepal</i>	4		1	1	6
Inter-country 3rd	15-28th Sept. 1999	32	12 <i>5 from Nepal</i>	5	1		5	11
4th Inter Country	May 29-June 9, 2000	45	15 <i>7 from Nepal</i>	2	3	3	4 <i>(2 JSI+ 2JICA)</i>	12 3 <i>(BPKIHS &amp; 1 IOM)</i>
National Course	9-20 Nov. 1997	15	5	4	2	9		15
Facilitator's course	5 - 9 Jan. 1998	12	4	8		3	1	12
TOT for Basic Health workers	17 – 22 Aug. 1998	10	2	2		2	6	10

*(Pediatr.- Paediatrician, M.O. – Medical Officer, P.H.O. – Public Health Officer)*

## Health Facility Level Training

S. No.	IMCI Training	Date	Venue	No. of Participants	Total
1.	<b><u>Mahottari District (11 days)</u></b> First _____ Second _____ Third _____	10 - 21 Dec. 1997 4 - 15 May 1998 31 Aug. - 11 Sept. 1998	Janakpur, Dhanusha Janakpur, Dhanusha Janakpur, Dhanusha	15 15 16	46
2.	<b><u>Nawalparasi District (9 +2 days)</u></b> TOT HPI level SHPI level	15 - 25 Aug. 1999 5 - 15 Sept. 1999 19 Sept.-18 May. 2000	Bharatpur, Chitwan Bharatpur, Chitwan Parasi Bazar and Bharatpur	14 15 144	173
3.	<b><u>Bardiya District (9 +2 days)</u></b> HPI level SHPI level	30 Nov. - 10 <sup>th</sup> Dec. 1999 4 Jan. - 14 <sup>th</sup> Jan. 2000	Gulariya Nepalgunj, Bardiya	22 44	66
4.	<b><u>Kanchanpur (9 +2 days)</u></b> HPI level HPI level	21 April - 1 May, 2000 21 July-25 August, 2000	Dhangadi Dhangadi	21 65	86
<b>Total:</b>					371

## Community Health Workers/FCHVs Level Training

Activities	Date	Venue	No. of Participants
Village Health Worker (VHW ) and Maternal Child Health Worker (MCHW ) Training	September, 1999 to December, 2000	Different Health Facilities	173
Female Community Health Volunteer (FCHV ) Training	September 1999 to December, 2000	Different Health Facilities	1534
Village Development Committee ( VDC ) Orientation	September, 1999 to December, 2000	Different Health Facilities	1029
Mother's Group Orientation Meeting	September, 1999 to December, 2000	Different Health Facilities	17936
Drug Retailers	September, 1999 to December, 2000	Kathmandu, Mahottari and Nawalparasi	672
Traditional Healers	September, 1999 to December, 2000	3 districts	405

## **Results of 3 rounds of Monitoring and Follow-up Visits After The Training in IMCI, Mahottari**

### **TRAINING OF HEALTH WORKERS**

- Training courses conducted in December 97, May 98 and August/September 1998.
- 3 DPHO Office Staff and 46 Health workers in District Hospital, PHCs, HPs and Sub Health Posts have been trained so far.

### **FOLLOW UP AFTER TRAINING ACTIVITIES**

- Conducted in February 98, July 98 & March 99
- 3 district supervisors were trained.
- 12 health workers in February, 9 Health workers in July 1998 and 11 Health workers were followed up in March 1999. Altogether 70% of trained health workers had been followed up.
- Results of the follow up visits

	<b>February 98</b>	<b>July 98</b>	<b>March 99</b>
Number of Health facilities visited	09 of 10	8 of 10	12 of 13
Number of Children Observed	12	9	11
Number of Care Taker interviews conducted	11	8	8
Facilities with at least 50% of Clinical Staff	4 of 9	6 of 8	9 of 12
Trained in IMCI	44	75	75

## FACILITY SUPPORT IN MAHOTTARI DISTRICT

<b>Problems Identified</b>	<b>February 98 n = 9</b>	<b>July 98 n = 8</b>	<b>March 99 n =</b>
<b><u>Space &amp; equipment</u></b>			
No weighing scale	7	2	3
No timing devise	1	0	4
No IMCI chart booklet	4	2	4
No mothers cards	2	1	4
No OPD register	1	0	5
<b><u>Oral Rehydration Therapy Corners (ORT/corners)</u></b>			
No functioning ORT/Corners	9	2	5
No source of drinking water	4	0	4
No enough supplies	5	3	3
No ORT register available	9	8	12
<b><u>Immunization</u></b>			
No refrigerator	9	8	11
No sterilizer	3	0	3
No Immunization cards	6	4	2
Not all vaccines available	7	7	5
<b><u>Clinic and referrals</u></b>			
Health Post not opened as Scheduled	3	1	0
Immunization services not always available	9	8	11
Seven minimum IMCI drugs not in stock	9	8	12

## QUALITY OF CASE MANAGEMENT IN CASES OBSERVED

Information on the quality of case Management	Findings		
	February 98	July 98	March 99
Children assessed for all danger sings	5 of 12	4 of 9	10 of 11
Children assessed for all main symptoms (Cough, diarrhoea, fever, ear Problem)	10 of 12	8 of 9	10 of 11
Children assessed for nutritional status	-	-	9 of 11
Severe cases referred	1 of 1	0 of 1	3 of 3
Severe cases that received first dose of appropriate drug before referral	1 of 1	0 of 0	3 of 3
Cases of pneumonia who received a full course of antibiotic at the health facility	1 of 1	4 of 4	3 of 3
Cases of diarrhoea with some dehydration who received ORS at the facility	0 of 1	1 of 2	0 of 0
Cases of children not refereed, who received instructions on home treatment, or home care	5 of 11	7 of 8	6 of 9
Cases to be treated at home whose care takers, when leaving the facility knew the three rules of home care (fluid, food, when to return)	4 of 11	4 of 8	1 of 9
Cases who should have received an immunization according to the schedule, and received in the day of the visit	0 of 5	0 of 4	0 of 3
Cases who need to be assessed on feeding and were assessed.	5 of 9	5 of 7	9 of 9
No. of care takers who were counselled on feeding problems.			4 of 9 (3 referrals and 2 did not counsel)

**OBSERVATIONS ON HEALTH WORKERS'  
SKILLS IN PRACTISING IMCI**

1. Health workers have started practicing IMCI and have the ability to manage the children according to IMCI
2. Health workers have correctly managed all Pneumonia cases
3. Most have asked for all main symptoms like cough, diarrhoea, fever and ear problem
4. Only 19 out of 32 children were assessed for all danger signs
5. Only 17 out of 32 children were assessed for nutritional status
6. Four children were correctly referred but one was not referred.
7. In February giving home care advice was weak but in July 1998 and March 1999, Health workers did well in this area.
8. Only 9 out of 28 caretakers were able to recall all 3 rules in home care.
9. Only 14 out of 25 children who need to be assessed and counselled in feeding received the counselling.
10. Only one out of 3 children with some dehydration received ORT according to plan B.

## **ISSUES AND RECOMMENDATIONS ON HEALTH WORKERS' SKILLS**

1. All children should be correctly assessed for danger signs
2. Nutritional assessment should be done on all children who are either below 2 years of age or are very low weight and proper counselling on feeding need to be done accordingly.
3. Health workers are weak in managing children with some dehydration and they should be kept in the health facility for 4 hours while giving ORS.
4. Mothers should be counseled using mother's cards and must recheck their knowledge in three home rules and how to administer drugs.
5. If recording forms, chart booklets and mother's cards are correctly used it will not be difficult to practice IMCI well.

## **OBSERVATIONS MADE ON HEALTH SYSTEMS' SUPPORT TO IMPLEMENT IMCI**

1. 11 health workers were absent without a reason for last 1-7 days
2. All 3 district health management team members were involved in follow up in the first day but only one was involved in the third day.
3. 8 Health Workers were transferred out of the district.
4. Availability of weighing scales had been improved well after the first follow up visit.
5. Chart booklet, recording forms and mother's cards availability have been increased since the first follow up visit.
6. 6 ORT corners have been established since the first follow up visit.
7. ORT registers were not available in any of the health facilities.
8. Vaccines were not available in adequate amount and on a regular basis.
9. Vaccines were administered by VHW without supervision in most of the places. Cold chain maintenance and sterilization techniques were not optimal in most facilities.
10. In all of the facilities visited, all the 7 essential IMCI drugs were not available during all 3 follow up rounds.
11. Some drugs were not available for the patients in the OPD although the drugs were available in the stores.
12. All IMCI tasks were not done by IMCI trained health workers in some facilities even when there were IMCI Trained health workers upto the 2<sup>nd</sup> follow up visit but most of the health workers were found to practice IMCI during the 3<sup>rd</sup> round follow up visit. District Hospital, Jaleswor is running a regular IMCI clinic for <5 children. The IMCI trained health workers are doing duty on rotation.

## **ISSUES AND RECOMMENDATIONS ON SUPPORT OF HEALTH SYSTEM FOR IMCI**

1. Keep health posts open from 10.00 a.m. - 2.00 p.m. in all working days.
2. District team and health workers especially health post in - charges need to cooperate with follow - up activities by being available during follow up visits.
3. Proper coordination of supplying drugs between storekeepers and health workers in the OPD has to be improved.
4. Measures to increase the availability of drugs are essential.
5. Providing additional refrigerators in district HQ and health facilities.
6. Supply of vaccines in a correct cold chain conditions during scheduled immunization days.
7. District team to follow-up and monitor regularly without the presence of the central staff.
8. ORT corner register is necessary for proper monitoring of giving ORS to sick children.
9. Health facilities should develop a mechanism to motivate people to come to health facilities?

### **IMCI Review Meeting, 17 - 25 September, 1998**

<b>MAJOR RECOMMENDATIONS</b>	<b>PROGRESS</b>
<ul style="list-style-type: none"><li>◆ In order to support implementation especially, in districts implementing Strengthening District Health System (SDHS), a strong link and better collaboration between Child Health Division and the Planning and Foreign Aid Division (PFAD) of the Department of Health Services should be established.</li><li>◆ An IMCI Working Group spearheaded by the DHO should be established at the District Level to facilitate the integration of IMCI in the district health system. The district health management committee and the Regional Director should be actively involved in the introduction, implementation and monitoring of IMCI activities at the district level.</li><li>◆ An orientation and coordination meeting should be organized for sensitizing donors and supporting agencies in order to mobilize more support and commitment for the IMCI strategy and its implementation.</li><li>◆ The Ministry of Health should increase the allocated budget for supporting IMCI implementation.</li><li>◆ Vaccines should be made available in adequate amount at times specified for immunization sessions at the first level health facilities. The national EPI policy which is currently under review, should be in line with the IMCI strategy and should be finalized.</li></ul>	<ul style="list-style-type: none"><li>◆ Section Chief from Planning and Foreign Aid Division was trained in IMCI and was included in the IMCI working group as a member.</li><li>◆ District Health Management Team (DHO, PHO and Focal Persons for CDD/ARI/NUTRITION/EPI) is also appointed as a District Level IMCI Working Group. Co-ordination is made with the Regional Director.</li><li>◆ One small meeting was organized with 4 major INGOs-ADRA, CARE, PLAN and SCF (US). CARE is working in collaboration with us in one district. JICA is interested to take up 3 districts under our technical support this year.</li><li>◆ HMG Budget is being allocated for printing of mother's cards and recording forms. This budget is increased by 10% every year.</li><li>◆ Action is being taken. But in our situation it does not seem to be feasible.</li></ul>

**Annex-V**

<ul style="list-style-type: none"><li>◆ The MOH should promote the rational use of drugs and strengthen the existing drug supply management system (e.g. procurement, distribution) in order to improve the availability of drugs needed for IMCI, including the pre-referral and second line drug at first level health facilities. This should be done in co-ordination and collaboration with DDA, LMD, EDCD, RMS and DHO.</li><li>◆ The MOH in collaboration with the Institute of Medicine (Tribhuvan University) and WHO should explore the possibility of introducing IMCI in the pre-service training.</li><li>◆ The existing working group (CHD, JSI/USAID, UNICEF, WHO) involved in the CDD/ARI reactivation programme should be involved in developing a strategy for improving family and community practices in districts implementing IMCI.</li><li>◆ Trainers from different departments of health, professional associations, NGOs and INGOs should be identified and their skills developed in order to support district level training, follow-up and supervision.</li><li>◆ In line with the national policy, districts for expansion of IMCI should be selected among those that have introduced interventions such as SDHS, ARI/CDD reactivation programme, community drug programmes and other community interventions; by July 1999 (end of fiscal year) IMCI should be expanded to cover two additional districts-Nawalparasi and Makawanpur.</li></ul>	<ul style="list-style-type: none"><li>◆ One meeting was organized with DDA and LMD and request was made to include IMCI drugs in the Essential Drugs List (EDL). DDA will hold a meeting with experts in which one representative from Child Health Division will be invited.</li><li>◆ IOM has started IMCI pre-service training after developing IMCI curriculum.</li><li>◆ On going.</li><li>◆ One TOT was conducted in which representatives from donors and INGOs were invited. Even in first district level training INGO representatives were trained.</li><li>◆ Is being followed. Partners suggested to select Bardiya and Kanchanpur in place of Makwanpur because being a hilly district, it would be difficult to do follow up visits.</li></ul>
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## **FOLLOW UP AFTER TRAINING ACTIVITIES**

### **COMPARISON OF HEALTH POST LEVEL RESULTS OF THE FOLLOW VISITS OF 2 DISTRICTS**

	<b>Mahottari February 1998 (IMCI - 11 Days)</b>	<b>Nawalparasi December 1999 (CB-IMCI - 9 Days)</b>
Number of Health facilities visited	9 of 10	11 of 13
Number of Children Observed	12	33
Number of Care Taker interviews conducted	11	29
Facilities with at least 50% of Clinical Staff	4 of 9	11 of 11
Trained in IMCI	44	47

**FACILITY SUPPORT**

<b>Problems Identified</b>	<b>Mahottari February 1998 (IMCI - 11 Days) n=9</b>	<b>Nawalparasi December 1999 (CB-IMCI - 9 Days) n=13</b>
<b><u>Space &amp; equipment</u></b>		
No weighing scale	7	0
No timing device	1	1
No IMCI chart booklet	4	4
No mothers cards	2	5
No OPD register	1	0
<b><u>Oral Rehydration Therapy Corners(ORT/corners)</u></b>		
No functioning ORT/Corner	9	4
No source of drinking water	4	0
No enough supplies	5	2
No ORT register available	9	10
<b><u>Immunization</u></b>		
No refrigerator	9	4
No sterilizer	3	0
No Immunization cards	6	2
Not all vaccines available	7	0
<b><u>Clinic and referrals</u></b>		
Health Post not opened as scheduled	3	0
Immunization services not always available	9	11
Seven minimum IMCI drugs not in stock	9	10

## QUALITY OF CASE MANAGEMENT IN CASES OBSERVED

Information on the quality of case Management	Finding			
	MAHOTTARI (IMCI - 11 Days) February 98		NAWALPARASI (CB-IMCI - 9 Days) December 1999	
Children assessed for all danger signs	5 of 12	42%	26 of 31	84%
Children assessed for all main symptoms (Cough, diarrhoea, fever, ear Problem)	10 of 12	83%	30 of 31	97%
Children assessed for nutritional status	-	-	28 of 33	85%
Severe cases referred	1 of 1	100%	2 of 2	100%
Cases of pneumonia who received a full course of antibiotic at the health facility	1 of 1	100%	10 of 10	100%
Cases of diarrhoea with no or some dehydration who received ORS at the facility	0 of 1	0%	3 of 4	75%
Cases of children not referred, who received instructions on home treatment, or home care	5 of 11	45%	24 of 26	92%
Cases to be treated at home whose care takers, when leaving the facility knew the three rules of home care (fluid, food, when to return)	4 of 11	36%	18 of 25	72%
Cases who needed to be assessed on feeding and were assessed.	5 of 9	56%	16 of 23	69%
No. of care takers who were counselled on feeding problems.			29 of 29	100%

## CB-IMCI Activities Completed in 2001

S.N.	Activity	Venue	Date	No. of Participants
1.	Doctor's Training Course on IMCI (10 days)	Kathmandu	7 - 16 January '01 17 - 26 January '01 28 Jan. - 6 Feb. '01	27 (9+9+9)
2.	IMCI training of Health Workers (9 + 2 days) of Bardiya	Nepalgunj Bardiya	21 Sept. - 1 Oct. '01	24
3.	Nursing Staff Training on IMCI	Kathmandu	22 Feb. - 4 May '01	104
4.	Training of Trainers (ToT) for DDC/VDC members and health staff	Nawalparasi	7 - 10 March '01 12 - 15 March '01	40
5.	Facilitator's course for NEPAS participants (5 days)	Kathmandu	21 - 25 March '01 26 - 30 March '01 3 - 7 August '01	39 (11+11+17)
6.	ToT for NEPAS participants	Kathmandu	11 - 20 March '01 24 July - 1 Aug.'01	10 19
7.	IMCI training of Health Workers (9 days)	Dhanusha	8 April - 3 July '01 (8 Batches)	184
8.	IMCI training of Health Workers (9 + 2 days)	Mahottari	1 August - 10 Sept. '01	96
9.	District Planning Meeting	Kaski	9 & 10 August '01	31
10.	Inter-country Training for Indonesian and SEARO & Extra SEARO Region participants	Kathmandu	12 - 23 August '01	27
11.	IMCI Training of Health Workers (9 days)	Kaski	16 Sept. - 11 Nov. '01	95
12.	IMCI Training of Health Workers (9 days)	Rupandehi	August - December '01	95
13.	Pre-service focal person's training (11 days)	Kathmandu	17 - 27 September '01	11
14.	Pre-service Professor's course (5 days)	Kathmandu	8 - 12 October '01	10

*Development of Integrated Management of Childhood Illness in Nepal*

15.	IMCI Training of Health Workers of Nawalparasi	Chitwan	5 - 15 December '01	24
16.	Follow-up of IMCI trained Health Workers of Nawalparasi	Nawalparasi	7 - 11 August '01	20
17.	Follow-up of IMCI trained Health Workers of Dhanusha	Dhanusha	July - October '01	64
18.	Drug Retailer's Training	Bardiya	25-28 December '01	130

*Annex VIII***IMCI Training in Nepal update (up to June, 2002)**

<b>S. No.</b>	<b>Training Level</b>	<b>Designation</b>	<b>No. of Participants</b>
1.	Inter Country (Total Six)	Doctors and Public Health Officers	45
2.	National Level	Doctors and Public Health Officers	52
3.	ToT Basic Health Worker's Course	Doctors and Public Health Officers	10
4.	ToT for NEPAS	Paediatricians and Public Health Officers	40
5.	5 Days Nursing Package	Nurses of Kanti Children Hospital	104
6.	IMCI 5 days Facilitators Training	Paediatrician, Medical Officers and Public Health Officers	75

## District Level Training

Training Received	Mahottari	Dhanusha	Nawalparasi	Bardiya	Kanchanpur	Rupandehi	Kaski	Grand Total
<b><u>Health Facility Level</u></b>								
Medical Doctors	2	2	2	1	1	6	0	14
HA	9	13	8	10	11	11	7	69
AHW	100	132	114	62	28	99	55	590
Staff Nurse	-	2	6	7	1	2	8	26
ANM	22	21	38	22	12	21	22	158
Health Supervisor	2	11	20	8	35	5	3	84
Others	7	3	5	-	-	-	-	15
<b>Total:</b>	<b>142</b>	<b>184</b>	<b>193</b>	<b>110</b>	<b>88</b>	<b>144</b>	<b>95</b>	<b>956</b>
<b><u>Community Level</u></b>								
VHW/MCHW	146	-	84	57	32	-	-	319
FCHV 1 <sup>st</sup> Phase	679	-	715	819	633	-	-	2846
FCHV 2 <sup>nd</sup> Phase	671	-	687	784	613	-	-	2755
Traditional Healers	250	-	239	101	65	-	-	655
Mothers' Group Orientation	18934	-	12081	10616	9957	-	-	51588
VDC Orientation	986	-	667	362	219	-	-	2234

# EVOLUTION OF CDD/ARI PROGRAMME

Annex- IX

