BACKGROUND

The Community-Based Integrated Management of Childhood Illnesses (CB-IMCI) program in Nepal evolved from earlier programs including the Control of Diarrheal Disease (CDD) Program, initiated in 1982 and the Acute Respiratory Infection (ARI) program, in 1987. Emphasis on community-level involvement in Nepal started with the ARI Strengthening Program in 1995, followed by CDD in 1996. These approaches were combined into the CBAC (community-based ARI/CDD) Program.

The WHO/UNICEF IMCI program, with its emphasis on detecting and managing major illnesses in children, was first implemented in a few health facilities (HFs) in 1997. Combined with a community-level component, based on CBAC, it is now known as the CB-IMCI program. JSI took this approach, combining CBAC with IMCI to three districts in 1999 and as of April 2007, the CB-IMCI program has been gradually but steadily expanded to 41 districts.

Through the Nepal Family Health Program (NFHP)—a program designed to improve the delivery and use of family planning and maternal and child health (MCH) services, particularly at the community level—JSI has been in the forefront of this initiative, with involvement in initial policymaking and advocacy, as well as supporting the government in implementation and support for this program in over 24 of the 41 districts where CB-IMCI has been implemented thus far. Additionally, NFHP has also been a technical resource in helping other donors implement and support the CB-IMCI program.

The CB-IMCI initiative in Nepal is gaining international recognition because of its very strong community case-management component, in which peripheral health workers, especially Female Community Health Volunteers (FCHVs), are trained to recognize and treat pneumonia and diarrhea in children under five years of age. This strategy in IMCI is unique to Nepal.

Initially there was concern among some senior Government of Nepal (GON) officials about allowing FCHVs to treat children with pneumonia using antibiotics because a large proportion of the FCHVs were illiterate. A working group of child health professionals within the Ministry of Health and Population (MOHP) and partner organizations recommended further research to compare results when FCHVs were allowed to treat children with pneumonia using Cotrimoxazole-Pediatric (Cotrim-P) tablets, while others only referred cases of pneumonia to the health facility.

A formal evaluation of this program in four initial districts, conducted with technical support from WHO, UNICEF and USAID in 1997, found that FCHVs were able to deliver quality pneumonia assessment and management in their communities. Additionally, in these two districts where FCHVs were allowed to provide the antibiotic, twice as many children at risk from pneumonia were identified and treated as compared to the other two districts where FCHVs were only allowed to refer sick children with pneumonia to HFs. Therefore, on the recommendation of the evaluation team, senior pediatricians and child survival experts, the MOHP adopted a plan for cautious expansion of the program, allowing FCHVs to treat pneumonia.

As a result of the positive impact of the CB-IMCI program over the years, the GON is set to rapidly expand CB-IMCI across the country within the next three years and hopes for significant financial and technical support from donors in addition to government resources.
Key Achievements

- The CB-IMCI program (especially community-based diarrhea and pneumonia management), together with other programs such as the biannual Vitamin A campaign and improved immunization coverage contributed to the reduction in childhood mortality.
- CB-IMCI increased access to effective pneumonia treatment and diarrhea management for children under five years old by providing these services through peripheral community health workers. The Government of Nepal (GON) is now providing over 50 percent of the budget for the CB-IMCI program.
- Increased the knowledge and skills of health workers, training over 4,406 health workers and 26,099 community health workers (VHW/MCHWs and FCHVs) in CB-IMCI. In addition, oriented 45,215 VDC/DDC members, 6,308 traditional healers, and 352,628 members of mothers’ groups on providing support for CB-IMCI.
- Increased the percentage of expected pneumonia cases treated in program districts each year since 1995. In these districts nearly 70 percent of expected pneumonia cases were treated compared to only 30 percent in other districts. There was 98 percent accuracy for correct assessment/classification and treatment of pneumonia by FCHVs and they provided over 50 per cent of the care.

Other Contributions from NFHP

- NFHP provided technical support in other CB-IMCI districts where partnering organizations provide the funding for CB-IMCI expansion.
- Implemented zinc for diarrhea management through CB-IMCI in two pilot districts in 2006 and provided technical support for zinc expansion to 18 new districts through the government’s health system.
- Provided technical support for private sector expansion of zinc for diarrhea management to PSI’s social marketing of zinc in the Kathmandu Valley.

STRATEGIC APPROACH

The CB-IMCI program in Nepal focuses on both curative and preventative care, aiming to improve health workers’ skills, the health system, and family and community practices. It involves a community-based package of services (to treat childhood illnesses) that aims to benefit the poor and those living in rural areas with poor accessibility to private health services. Community Health Workers (CHWs)—comprising the most peripheral workers in the health system, Village Health Workers (VHWs), Maternal and Child Health Workers (MCHWs) and Female Community Health Volunteers (FCHVs)—are trained and empowered to provide the community with health information on a wide variety of health issues and treatment for specific illnesses. After a short, but intensive CB-IMCI training, CHWs can determine if a child has pneumonia using a timer to count the respiratory rate. Nepal has been a world leader in giving the responsibility for pneumonia treatment to CHWs, including community volunteers such as FCHVs. They treat pneumonia in children with Cotrim-P tablets, follow up these cases and refer severe cases to a HF. Similarly, they can manage diarrhea with oral rehydration salts (ORS) and more recently with zinc, again referring severe cases to HFs.

Major Program Components

CB-IMCI implementation involves:

- Assessing and managing pneumonia and diarrhea by FCHVs and HF-based health workers. This has increased coverage of these services mostly due to their provision by CHWs, especially the FCHVs, who manage over half the cases. Monitoring data has consistently documented that FCHVs can correctly assess, classify and manage sick children at the community level.
- Checking the child’s vaccination status and advising the caretaker to return to the clinic on an immunization day, if the child has not completed his/her immunization schedule.
- Checking if the child was given Vitamin A and de-worming tablets during the last nationwide bi-annual campaign and providing them if necessary.
- FCHVs refer serious cases to health facilities.
- Orienting traditional healers, village development community (e.g., political leaders) and health facility operations and management committee (HFOMC) members to encourage them to play a supporting role to FCHVs.
- Organizing Mothers’ Group orientations about when and where to seek care for sick children.
**STEPS IN PROGRAM IMPLEMENTATION**

1. At the beginning of each year, the CB-IMCI working group at the Child Health Division, MOHP, which includes donor partners and government counterparts, develops a workplan for the coming year, including selection of new districts. External partners commit to support implementation.

2. A two-day district-level planning and orientation meeting is held; it is used as a platform to secure verbal and written commitment from District Development Committee (DDC) members, local political and religious leaders, local nongovernmental organizations (NGOs), and other stakeholders to support the CB-IMCI program.

3. District level supervisors and HF-based health workers receive a seven-day training which includes supervised clinical sessions, using the CB-IMCI algorithm to assess, classify, and treat sick children brought to the district hospital during clinical sessions under the supervision of trainers.

4. A small group of staff from the district, capable of co-facilitating the remaining CB-IMCI training, are given a two-day training of trainers. These local trainers then assist in future trainings. This has helped to reduce the cost of training, without compromising quality, and has increased the district’s sense of ownership of the program.

5. CB-IMCI community-level training begins with a two-day Program Management Training for Supervisors, emphasizing health worker’s supportive supervisory duties, and is followed by a five-day VHW/MCHW training, similar to the training for HF level staff described above.

6. The FCHVs receive CB-IMCI training in two phases. During their five-day 1st phase training, they learn about ARI and pneumonia treatment, including use of Cotrim for treatment of “pneumonia only” cases. In the two-day 2nd phase, they learn about diarrhea management, nutrition counseling and immunization. A mother’s group meeting in the community, held on the last day of phase 1 training, with active involvement of Village Development Committee (VDC) members, local NGOs, and health staff, helps highlight the FCHV’s role, diagnosing and treating pneumonia.

7. The community-level training also includes a traditional healers’ orientation in which they are requested to promptly refer pneumonia cases to the nearest FCHV or HF.

8. A follow-up post-training visit is conducted and further Technical Support Visits to CHWs are also included in the NFHP district level support to the CB-IMCI program (see NFHP Technical Brief # 18: Technical Support Visits).

**LESSONS LEARNED**

- **Advocating at the district level increases local ownership:** At district planning and orientation meetings, support is mobilized from local decisionmakers and other stakeholders, such as I/NGOs working in the district.

- **It is essential to design material appropriate for training illiterate and semi-literate community health volunteers** such as FCHVs. Suitable, low-literacy training materials have enabled FCHVs to learn the skills necessary to play an effective role in reducing childhood morbidity and mortality.
• Programs need to look for opportunities for innovations: Several innovations to the IMCI package developed by WHO were made in Nepal to better suit the local context (see NFHP Technical Brief #4, Innovations in Community-Based Integrated Management of Childhood Illnesses).

• Building strong partnerships makes a strong program: Effective collaboration between GON and external donors is needed to implement and maintain a complex program. Collaboration has occurred in many forms including cost sharing, joint planning, training and implementation, and shared responsibility for logistical and technical support.

• Strengthening the referral system is needed: The program has a referral mechanism that needs strengthening, to address the needs for appropriate care of young infants (less than two months).

• Reinforcing community linkages is vital: Working closely with traditional healers, VDC members and HFOMC members helps encourage them to support the CB-IMCI Program and FCHVs.

CONSTRAINTS AND CHALLENGES

• Maintaining a regular supply of commodities such as Cotrim-P, ORS and timers is essential though it can be difficult to ensure 100% availability in all locations. Maintenance costs for certain commodities (e.g. replacement batteries for ARI timers) are high and must be considered each year in annual budgeting.

• Providing an adequate supply of all CB-IMCI training and program-related materials to ever increasing numbers of CB-IMCI districts is difficult and expensive.

• Maintaining the quality of the program as CB-IMCI rapidly expands throughout the country is difficult.
  ▪ Having a consistent and adequate supply of first and second line CB-IMCI drugs to meet the growing demands has been challenging.
  ▪ Maintaining knowledge and skills of health workers and volunteers is difficult for two reasons. First, frequent monitoring and supervision of volunteers is essential, but it is also extremely costly and time consuming to conduct review monitoring meetings. Second, the GON transfers trained workers every two years to non-program districts, creating a void in trained workers in the program districts.

• CB-IMCI program sustainability can only be achieved if the GON is able to take more responsibility for the program in each district. Initially, external development partners funded all implementation, but from the 2007 fiscal year the Government of Nepal is supporting more than 50 percent of the program costs for expansion to new districts.

In the spring of 2006, NFHP supported the GON to conduct a review of the CB-IMCI program and the recommendations of this review will be utilized to further strengthen the program.

REFERENCES

3. CB-IMCI Strategic Review 2006/07