Nepal Family Health Program II
Technical Brief # 3
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Overview of Community-Based Integrated Management of Childhood Illnesses

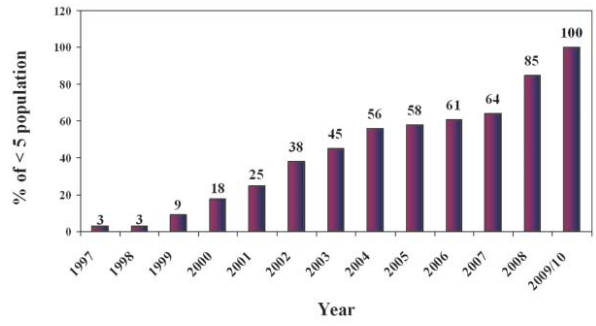
Female community health volunteer (FCHV) counting the respiratory rate of a sick young infant

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 (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 Mahottari 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 (Nawalparasi, Bardiya and Kanchanpur) in 1999 and as of June 2020, the CB-IMCI program has been gradually but steadily expanded all 75 districts.

Year-wise under-5 population covered by the program



Through the Nepal Family Health Program II (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 at the forefront of this initiative, with involvement in initial policy-making and advocacy, as well as supporting the government in implementation and support for this program in all 75 districts. 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 and refer the sick neonates and young infants that show any danger signs. 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 (HF).

A formal evaluation of this program in four initial districts[1], 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 using Cotrim-P and diarrhoea with oral rehydration solution (ORS) and zinc.

As a result of the positive impact of the CB-IMCI program over the years, the GON rapidly expanded CB-IMCI in all districts by 2010.

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[2] 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) has a strong sense of ownership of the program and is now providing over 50 percent of the budget for the CB-IMCI program.
- Seventy percent of expected pneumonia cases were treated by CHWs and 30 per cent at HFs. Likewise 72 percent of the under-5 diarrhoeal cases were treated by CHWs and 28 percent treated at HFs. There was 98% accuracy for correct assessment/classification and treatment of pneumonia by FCHVs.
- Under the CB-IMCI program, HF staff have assessed 33,751 sick young infants, out of which 7,173 were classified as having PSBI, 14,594 LBI, 4,057 low weight and feeding problems and 7,927 having other problems. These cases were all managed appropriately.

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 all 75 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.

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 public and private health facilities and services. Community Health Workers (CHWs)—comprising the most peripheral workers in the health system such as 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 usi ng 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 ORS and zinc, again referring severe cases to HFs. They also counsel mothers on essential newborn care.

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 counseling mothers for early initiation of breast feeding, exclusive breast feeding and complementary feeding after 6 months. They also provide counseling to mothers on IYCF and refer under 5 children to HFs for growth monitoring.
- FCHVs referring sick neonates and young infants showing danger signs to HFs.
- Orienting traditional healers, village development community (e.g. political leaders) and health facility operation 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

STEP 1. At the beginning of each fiscal year, the CB-IMCI working group at the Child Health Division, Department of Health Services, which includes donor partners and government counterparts, develops a CB-IMCI workplan for the upcoming fiscal year. External partners commit to support implementation and allocation of resources. This process helps avoid duplication of resources and helps jointly address issues using the SWAp approach.

STEP 2. A 2-day district-level planning and orientation meeting is organized at DHO/DPHO with program supervisors to prepare the detailed implementation plan up to the community level. This is used as a platform to secure verbal and written commitment from District Development Committee (DDC) members, local political and religious leaders, local non-governmental organizations (NGOs) and other stakeholders to support the CB-IMCI program.

STEP 3. District-level supervisors and HF-based health workers receive a 7-day training which includes supervised clinical sessions, using the CB-IMCI algorithm to assess, classify, and treat sick neonates and children brought to the district hospital.

STEP 4. A small group of staff from the district, capable of co-facilitating the remaining CB-IMCI training, are given a 2-day training-of-trainers. These local trainers then assist in future trainings. This has helped build the capacity of DHO/DPHO staff, reduce the cost of training, without compromising quality, and has increased the district's sense of ownership.

STEP 5. After completion of a 7-day clinical training, a 2-day training on CB-IMCI program management for DHO/DPHO supervisors and health workers is conducted. This training focuses on strengthening facilitation techniques. They are also taught how to properly record

STEP 6. The FCHVs receive CB-IMCI training in two phases. During their 5-day 1st phase training, they learn about ARI and pneumonia treatment; referring sick neonates with danger signs; and essential newborn care. In the 2nd phase they learn about diarrhea management with zinc and ORS, 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 of diagnosing and treating pneumonia.

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

STEP 8. A follow-up post-training visit is conducted and further Technical Support Visits to HFs and CHWs are also included in the NFHP district-level support to the CB-IMCI program.

Program maintenance activities:

One-time training is not enough to retain the knowledge and skills of health workers and CHWs. They require frequent support to remain updated and receive feed back about their performance. As such, in 2008, it was decided that program maintenance activities be carried out and they include:

- Annual regional-level program performance review meeting for CB-IMCI focal persons
- District-level program performance review refresher meeting for HF in-charges
- Community-level program performance review refresher meeting for CHWs
- CB-IMCI training for newly recruited health workers
- CB-IMCI training for new FCHVs in place of drop-outs
- Intensive monitoring in low performing district/health facilities
- Supply and re-supply of drugs and other program related commodities
- Regular monitoring/supervision from GoN regular channel and external partners

LESSONS LEARNED

- **Advocating at district level increases local ownership:** At district planning and orientation meetings, support is mobilized from local decision-makers 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 the government, USAID/NFHP, UNICEF and WHO were made in Nepal to better suit the local context. These innovations are described in a separate technical brief (#4).
- **Building Strong Partnerships makes a strong program:** Effective, strong collaboration between GON and external donors is needed to implement and maintain the 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.
- **Program maintenance is essential**: To maintain the quality of the program, maintenance activities need to be carried-out at different levels. HWs and volunteers need frequent encouragement and motivation.

CHALLENGES

- Maintaining a regular supply of level-wise commodities such as Cotrim-P, ORS, zinc, gentamicin, second-line antibiotics for HFs and timers is essential and it can be difficult to ensure 100% availability in all locations. Maintenance costs for certain commodities (e.g. replacement for ARI timers) are high and must be considered each year during annual budgeting.
- Providing an adequate supply of all CB-IMCI training and program-related materials to maintain the program is challenging.
- Maintaining knowledge and skills of health workers and volunteers is difficult for two reasons. Firstly, frequent monitoring and supervision of volunteers is essential, but it is also extremely costly and time consuming to conduct review monitoring meetings. Secondly, HF staff and FCHVs that replace those that drop-out need additional training.

REFERENCES

1. WHO/UNICEF/USAID Assessment of the ARI Strengthening Program, 1997
2. Nepal MDG Progress Report 2005
3. CB-IMCI Strategic Review 2006/07
4. CB-IMCI desk review report 2009.

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