

## NUTRITION BULLETIN

**How well do trained health workers implement the Integrated Management of Childhood Illnesses (IMCI) strategy of the Department of Health?**

Infectious diseases and malnutrition are a major cause of death among Filipino children. Thus, the Department of Health (DOH) implements the Integrated Management of Childhood Illness (IMCI) strategy, which is an integrated approach to the appropriate management of five major diseases of children, namely: pneumonia, diarrhea, malnutrition, measles and malaria. Together, these five diseases account for 70% of child morbidity and mortality in the country. With funding from the United States Agency for International Development (USAID), Helen Keller International (HKI) has been extending technical assistance since 2000 to Regions 1, 3, 10, and 11 to implement the IMCI strategy. Recently, HKI in partnership with the DOH conducted an assessment of the implementation of the IMCI strategy in the four assisted regions and found out that trained health workers are implementing the IMCI strategy and that support systems for the facilities are in place or are being put in place to facilitate the IMCI strategy. The study also identified implementation aspects of the IMCI strategy that need to be improved.

In the Philippines, the Infant Mortality Rate is 35 per thousand livebirths, while the Under Five Mortality Rate is 48 per thousand livebirths. The survival and well being of under five children (UFC) is dependent on their nutrition, the care that their parents are able to give them, and the kind of health services available to them in the health facilities in their respective communities. Studies have shown that malnutrition acting together with infectious diseases especially at an early age is a major cause of mortality among Filipino children. The cycle of malnutrition and infection perpetuates itself and results in death or mental and physical disabilities.

The IMCI strategy includes a set of interventions that aim to reduce childhood death and illness, and to contribute to improve the child's physical and cognitive growth and development. The strategy has three components, namely, a.

*improving the case management skills of health workers and health facilities; b. improving the health system; and, c. improving family and community practices in caring (including feeding) for children.*

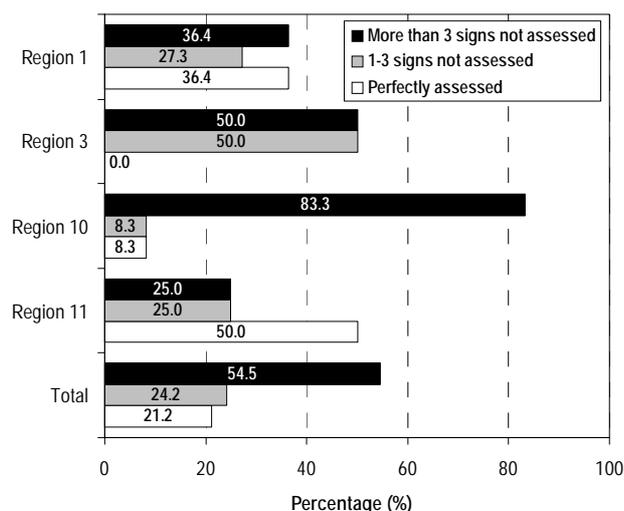
This bulletin presents the extent to which the IMCI strategy is being implemented in terms of the health workers' adherence to the IMCI approach to sick child care, as well as in the measures that have been undertaken to improve the overall health system.

**Assessment of IMCI implementation**

HKI and the DOH conducted an assessment of implementation of the IMCI strategy, particularly the health care system components, from August 26 to September 13, 2002, in three provinces each of Regions 1, 3, 10 and 11, and the City of Cagayan



**Figure 1.** Assessment of Children by Health Workers, by Region. (n=33)



de Oro in Region 10. Sampling for this study was purposive and a total of 34 facilities were visited, 21 of which were Barangay Health Stations (BHS), and 13 being Main Health Centers (MHCs). While the sampled facilities are not representative of the total areas where the IMCI strategy is being implemented, the results are likely to reflect what is happening in the other non-sampled facilities.

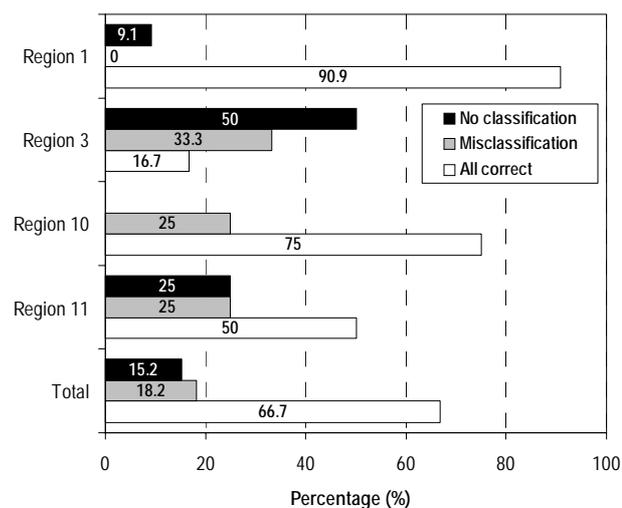
The assessment was conducted by a team of data collectors (from the DOH, Center for Health Development [CHD], Provincial/City Health Offices, and HKI), who observed 33 nurses/midwives in the 34 health facilities as they provided services for sick children. Later, they interviewed separately these nurses/midwives and the mothers/caretakers of the sick children brought to the health facilities. They used assessment tools that were adapted to suit local conditions from existing materials developed by the World Health Organization (WHO) for the IMCI Multi-Country Evaluation Health Facility Survey and tools for Follow-up Visit after IMCI Training. These tools included observation and records review checklists, interview questionnaires, and summary sheets.

### Practicing the IMCI approach

The results show that the health workers put into practice the IMCI approach, which entails assessing and classifying the sick child based on the signs and symptoms presented, and managing the child thus classified.

All of them used the IMCI assessment tools; however, there were differences in the completeness of their assessment (**Figure 1**). Two out of ten health

**Figure 2.** Classification of sickness assessed by health workers, irrespective of whether assessment was correct, by region. (n=33)



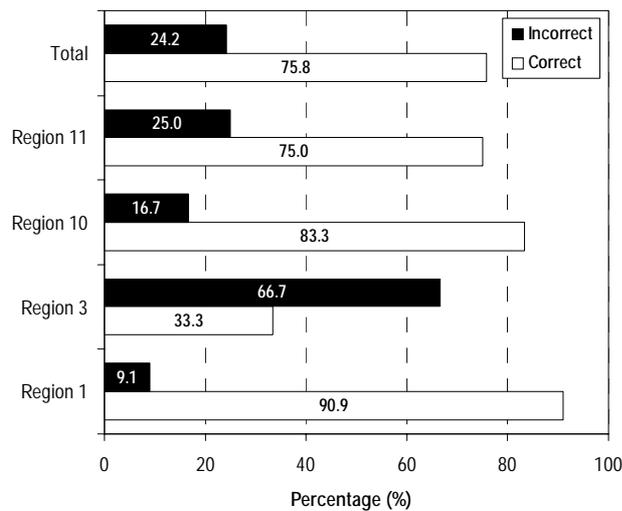
workers (21.2%) perfectly assessed the sick children they saw. About one fourth (24.2%) did not assess 1-3 of the signs presented by the sick child. More than half (54.5%) missed assessing more than 3 of the signs in the sick child. Incomplete assessment (and classification, eventually) was most common for the conditions of fever, visible signs of malnutrition, and feeding practices (information should be obtained by asking questions). The proportion of perfect assessment was highest in Region 11 (50%) and lowest in Region 3 (0%).

Given the assessments that the health workers made, regardless of whether they were complete/correct, two out of every three (66.7%) health workers went on to correctly classify the sick child (**Figure 2**). About one out of every five (18.2%) of them misclassified their patient/client. The rest (15.2%) did not make any classification at all for the assessment they made. Figure 2 also shows the variations in this measure across the four regions. When 21.2% of sick children were perfectly assessed and 66.7% correctly classified, 14.1% were correctly assessed and classified.

Then, three out of every four health workers were able to manage correctly the illness they had classified (whether correct or incorrect). Across the four regions, this proportion ranged from a high of 90.9% to a low of 33.3% (**Figure 3**). Part of the management of the sick child is counseling of the mother/caregiver on feeding practices. More than half (54.5%) of the health workers provided complete counseling on feeding practices.

Thus, when 14.1% were correctly assessed and classified, and 75% received correct treatment/

**Figure 3.** Management of Sicknes Identified by Health Workers, Irrespective of Whether Assessment and Classification was Correct, by Region (n=33)



management, no more than 10.6% of the children were managed correctly, in accordance with all the signs they presented. The main problem was conducting a complete and correct assessment of the signs presented by the patient.

### Supervision

Post-training follow-up and supervisory visits are an integral part of the IMCI training course. After the 11-day training course on IMCI, supervisors need to follow-up the trained health workers at their jobsites to observe their case-management skills within three months of training. Out of the 34 facilities visited, more than half (54.5%) received follow-up supervisory visits that included observation of case management. However, in three of the four regions, the proportion of health facilities that did NOT receive such follow-up visits ranged from 50 to 75.0%.

### Supplies

In the area of supplies, some drugs and medicines – particularly topicals, ophthalmics and injectables – are not purchased at all because the procurement system excludes the end-users (the health workers) in deciding which drugs and medicines are to be purchased. The end-users are passive recipients of whatever supplies are made available by higher levels of the health system.

All areas of the Philippines are endemic for dengue fever and health facilities should therefore be able to perform a Tourniquet Test, requiring a blood pressure cuff. However, it was found that only three out of 34 facilities had a pediatric blood pressure cuff.

### Recording and Referral

Recording and referral systems can be strengthened by the adoption of the IMCI strategy. However, a number of deficiencies were found. Health workers appeared to record the services they provide for sick children in different ways. This makes it difficult for local health authorities to collect service/coverage statistics that give an overall picture for different localities. Some health facilities have retained the Field Health Service Information System (FHSIS) to varying degrees, while others have adopted a recording system as designed by their LGU. In addition, there is a general shortage of recording and reporting forms. Considering these differences and deficiencies, a common recording and reporting system may need to be devised if meaningful service statistics for activities under the IMCI strategy are to be collected in the future.

The existing referral system in the facilities is generally sufficient, but it can be improved. Specific points that need to be looked into include the promptness of referral of the child with severe illness and making sure that the referred child accesses the referral facility and is followed-up after discharge from the referral facility.

### Conclusions

The health workers who have undergone the IMCI training in Regions 1, 3, 10 and 11 are adopting the IMCI strategies; however, there are deficiencies in the performance of the essential IMCI steps – assessing, classifying and treating/managing. The result of this is that for almost 90% of children their illness is not appropriately managed, primarily because their signs and symptoms are not correctly/ completely assessed and properly classified.

Support systems for the facilities to implement the IMCI strategy are existent to varying degrees. These systems include those for procuring and maintaining equipment and supplies, for recording and reporting, and for referral of the severely ill patients.

Follow-through support for trained staff at the health facilities by trainers is very limited. Provision of technical support offered by supervision from the local health systems as well as from the DOH (regional level) is frequently not available. This is a major explanation to the observed performance deficiencies of the health workers.

## RECOMMENDATIONS

The observed deficiencies in IMCI skills of assessment, classification and management can be corrected by:

1. Improving supervision, including:
  - a. Technical follow-up support of health workers by competent supervisors
  - b. Development and conduct of facilitative supervisory workshops and monitoring/supervision plans for the supervisors
2. Modifying training, including:
  - a. Reviewing and revising IMCI training materials
  - b. Including a test of the level of knowledge attained by the individual participant at the end of the training
  - c. Selecting supervisors of health workers for training as local IMCI trainer/facilitator (do not import trainers from other regions or LGUs, and do not train those that do not have a direct supervisory function)
3. Delegating some IMCI tasks to other members of the health team. This will allow the trained health worker to focus on the basic IMCI skills of assessment, classification and management of the child with illness.
4. Improving procurement for equipment, drugs and other supplies by involving the end-users (trained health workers)

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