
THE ANALYTIC REVIEW

OF THE INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS STRATEGY

Final Report
November 2003

DFID Department for
International
Development

unicef 



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This report contains the collective views of an international group of experts, and does not necessarily represent the decisions, or the stated policy of the World Health Organization.

This report has been prepared on behalf of the Analytic Review team by Thierry Lambrechts (WHO), Rajiv Bahl (WHO), David Robinson (DFID Consultant), Samira Aboubaker (WHO), and Oscar Picazo (USAID funded AED/SARA Project), with input from Joy Riggs Perla (USAID Consultant), Maria Francisco (USAID), and Al Bartlett (USAID).

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Executive Summary

The Integrated Management of Childhood Illness (IMCI) strategy to reduce childhood mortality and morbidity has three components: improving health worker skills; strengthening the health system; and improving family and community practices.

In 2002, DFID, UNICEF, USAID, and WHO con-

ducted an Analytic Review to identify the contribution of the IMCI strategy to improved child health outcomes and actions required to achieve greater coverage and impact. The findings and recommendations are based on a desk review, interviews with national and international informants, and an assessment of IMCI implementation experience in Egypt, Kazakhstan, Indonesia, Mali, Peru and Zambia.

RECOMMENDATIONS FOR COUNTRIES AND INTERNATIONAL PARTNERS

Support development of policies and interventions based on national context and priorities

- Countries, with the participation of implementing partners, should develop national policies and strategies that set child health priorities, define roles of IMCI and other key child health interventions, highlight links between those interventions, and identify appropriate delivery mechanisms.
- Health authorities at country and international level, with the support of partners, should analyse the impact of critical health system constraints on child health outcomes and address these constraints in plans for health system strengthening. These constraints should also be addressed in the situation analyses undertaken by the Ottawa Child Survival Partnership and brought to the High Level Forum and other international fora.
- Additional strategies including communication, social marketing, and other approaches should be implemented to complement traditional public health sector approaches, in order to accelerate achievement of improved child health and nutrition outcomes.

Better define the IMCI strategy, its scope and content and develop missing tools

- Each country should better define the position, role, and structure of IMCI, including the community component, in its health systems.
- WHO, UNICEF and implementing partners should increase IMCI effectiveness by providing additional elements, such as tools for and training in child health programme management, an IEC guide and approaches to monitor child health outcomes at household level using existing tools (e.g. over-sampling of IMCI areas when conducting DHS or MICS surveys) and/or an IMCI-related household survey instrument.
- Adaptations and innovations to IMCI training should be encouraged and evaluated in order to increase coverage while maintaining quality.
- As evidence becomes available for additional interventions in key areas of child health, such as neonatal health and HIV, countries, with support of WHO, UNICEF and implementing partners, should evaluate the potential role of IMCI and other approaches in delivering these additional interventions.

RECOMMENDATIONS FOR COUNTRIES AND INTERNATIONAL PARTNERS (continued)

Provide support for scale up of child health programmes and IMCI

- Considering the strengths of the IMCI strategy and the existing commitment and investment by countries, the IMCI strategy, with relevant improvements, should be continued and expanded, as part of a broader investment approach to improve child health outcomes.
- Countries and implementing partners should increase urgently the resources (human, financial, external and internal) devoted to child health programmes and make better use of existing financial and human resources (HIPC, PRSPs, private for-profit sector, communities) in order to achieve the under-five MDG targets in countries.
- Countries and implementing partners should provide adequate resources and mechanisms to monitor progress on key child health outcomes and use this information for managing child health programmes and resources.

Key Findings

Context

Causes of child mortality

With the exception of perinatal conditions, the leading causes of child mortality remain those covered in the IMCI case management guidelines. HIV/AIDS is an emerging cause of childhood death in sub-Saharan Africa. Malnutrition is widespread. Other key determinants of child mortality include maternal education, access to antenatal and delivery care, and access to safe water and sanitation. National data hide significant and widening economic, geographic and ethnic inequities; these inequities are a major obstacle to reducing child mortality.

Child health policies and financing

The MDGs are perceived as international rather than national goals. While national policies prioritise aspects of child health, notably immunisation, most countries do not have comprehensive child health policies. Child health, with the exception of raising immunisation rates, receives limited attention in Poverty Reduction Strategies.

Allocation of national government financing for child health within overall health services funding is hard to ascertain. In general, child health suffers from inadequate government funding, and financing is reliant on donor support. Child health is not adequately addressed in new financing modalities such as sector

wide approaches, budget support and debt relief. The potential impact on child health of increased resources available through the Highly Indebted Poor Countries' Initiative is unclear.

Accurate information about global financial resources for child health and trends in global funding is not available. However, specific funding allocations for child health have declined as donors shift to sector wide approaches and increase allocations to HIV/AIDS. Child health may benefit from additional resources made available through disease-specific global initiatives such as the Global Fund and Roll Back Malaria in countries where these diseases are significant problems. In other countries these initiatives may skew priorities, with an adverse effect on child health.

Health systems

Low utilisation of public health services is a major obstacle to reducing child mortality. Barriers include treatment and transport costs, perceptions about poor quality of services, lack of drugs, and behavioural and cultural factors. The impact of health system decentralisation on child health is unclear. Capacity to plan and implement child health programmes at district level needs to be strengthened to maximise the benefits of shifting resources and decision-making closer to users.

Use of private providers depends on country context; existing evidence suggests that in many countries the

role of such providers is substantial. No data are available to indicate what proportion of out of pocket expenditure on health is for childhood illness. The potential of the private sector, including NGOs, to deliver child health care and commodities is not considered systematically in national health plans.

Integrated Management of Childhood Illness

Perceptions of IMCI

Technical approach – The child health interventions included in IMCI are recognised to be technically sound; the holistic approach to child health and the conceptual framework for community interventions are appreciated; and the case management guidelines are acknowledged as good evidence-based standards for child care practice. The IMCI strategy does not cover perinatal care and covers only partially infant and young child feeding and immunisation; some countries have successfully adapted the generic case management guidelines to include these issues.

Conceptual understanding – There is a lack of clear understanding of some elements of the IMCI strategy, especially community interventions, of how the three components can best be implemented, and of what IMCI can be expected to deliver.

Implementation of IMCI

Government ownership – IMCI is included to some extent in national plans, but this is not matched by appropriate financial commitment and depends on external donor support, resulting in the perception that IMCI is donor driven. Decisions about implementation are increasingly taken at district level.

Structure and management – National ‘focal points’ often do not have the rank, authority or management structure of previous disease-specific programme managers. IMCI generally lacks several other elements required for successful programme implementation, such as a defined budget, logistic guidelines and tools, mechanisms for outcome monitoring, and a communication strategy.

Timeframe – There is considerable variation in the time taken to implement IMCI. In some countries it has taken less than 2 years, in others more than 6 years, to move from introduction to expansion beyond a few districts.

Integration of the three components – So far, none of the countries were implementing all three IMCI components in full or in an integrated manner. Most have focused on improving health worker skills; in some contexts IMCI is perceived to be a training programme. Less attention has been paid to the health systems strengthening and community components. Tools for these components were developed after tools for training.

Coverage – IMCI coverage is low, and this is attributed to lack of financial and human resources and poor working conditions with high turnover of health workers.

Coordination – Coordination during the initial phase of IMCI implementation has not been sustained. Despite mechanisms for coordination of implementing partners, there is little evidence of harmonised planning and monitoring or technical and financial inputs. Collaboration with EPI programmes is limited. There is collaboration with malaria control programmes on IMCI case management guidelines and training, and community activities.

Contribution of IMCI

Improving health worker skills – IMCI training is effective, improving health worker performance and motivation, quality of care delivered to sick children attending first level public health facilities, and caretaker satisfaction. There is evidence that it can improve rational drug use, but less data about impact on inappropriate referrals. The standard case management guidelines and training package for improving health worker skills are highly valued. Less than 10% of health workers in the public sector have been trained in IMCI in the six countries. However, medical and nursing schools are beginning to recognise the value of introducing IMCI and its training methods, which emphasize evidence-based and hands-on approaches. This could promote sustainability as well as reaching future private health providers.

Strengthening health systems – IMCI has succeeded in ensuring that drugs required for child health are included in essential drugs lists. In some contexts, it has improved availability of essential drugs at first-level facilities and follow-up visits to recently IMCI-trained health workers, although coverage with follow-up visits falls significantly as IMCI is expanded to additional districts. Beyond this, impact on health systems has so far been limited.

Improving family and community practices – The importance of the key practices for child health is well accepted and there is growing interest in community approaches. The planning process for community IMCI has yet to be implemented at country level, and in the six countries visited there is no experience of wide-scale implementation. Existing activities are small scale, poorly coordinated with health facility activities, and can be very costly.

Next steps

The Analytic Review steering committee will reconvene in 2004 to take stock of the progress made in implementing the Review recommendations, look at additional information related to IMCI expected from other ongoing evaluations, and consider the appropriateness of creating an interagency IMCI coordination group.

Every year more than 10 million children die before they reach their fifth birthday, many during the first year of life¹. Half of these deaths are due to acute respiratory infections, diarrhoea, measles, malaria, malnutrition, or often to a combination of these conditions. In response to these remaining challenges in child survival, the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) developed the Integrated Management of Childhood Illness (IMCI).

IMCI was developed as an approach to reducing child mortality in developing countries. It includes interventions known to be effective against the most common causes of child mortality. In 1995, case management guidelines for the integrated management of childhood illnesses at first-level facilities were finalized in a collaborative effort between WHO technical programmes and partners and supported by a programme of research². In 1996, a training course based on the case management guidelines was made available by WHO and UNICEF. This was specifically targeted at health workers in first-level facilities.

Beginning with this training effort, a broad strategy has been progressively developed that includes both preventive and curative interventions designed to improve child health and development. Today, the strategy includes interventions within three components:

- Improving health worker skills
- Improving the health system to deliver IMCI
- Improving family and community practices relevant to child health

Planning for the adaptation of the case management guidelines to local epidemiology and clinical practices and the training of the first health workers started in 1995. After a short period of exploratory implementation and close documentation in a small number of countries,³ IMCI was taken up by a rapidly increasing number of national health authorities and partner organizations. By the end of 2001, more than 33 countries had reported efforts to scale up IMCI beyond a few pilot districts⁴.

Since its introduction, much experience has been gained with IMCI. The three-component IMCI strategy has been implemented in a variety of ways in different countries. Several countries have completed one or more reviews of their IMCI implementation, and some countries have carried out facility-based evaluations to assess the quality of care delivered to sick children attending first-level facilities. A multi-country evaluation of IMCI effectiveness, cost, and impact (MCE) has been initiated in selected sites in Bangladesh, Brazil, Peru, Tanzania, and Uganda.

This report outlines the process, findings, and conclusions of an Analytic Review (AR) of the IMCI strategy, conducted jointly by DFID, UNICEF, USAID, and WHO/CAH, and suggests recommendations to move forward.

¹ Sources: WHO/EIP based on 2001 data, WHR 2002

² Integrated Management of Childhood Illness: a WHO/UNICEF initiative, WHO Bulletin, Supplement 1 to volume 75, 1997

³ Lambrechts T, Bryce J, Orinda V: The Integrated Management of Childhood illness: A summary of first experiences; Bulletin of the World Health Organization, 1999, 77 (7): 582-594

⁴ Based on information reported to WHO Regional Offices and HQ by January 2002

Many children are dying from lack of access to proven, inexpensive interventions. Today, 32% of the children from countries with 90% of worldwide child deaths are without the protection of measles immunization; 62%¹ to 80%⁶ do not receive oral rehydration therapy needed for diarrhoea; 60% do not receive appropriate antibiotic treatment for pneumonia; 61% are not exclusively breastfed during the crucial first months of life; 45% do not receive vitamin A supplementation; and 46% do not have a clean delivery by a skilled attendant at birth.²

The persistent and even growing inequity gap in health is a cause of disquiet to national governments and international organizations. There is a growing demand for evidence that interventions and mechanisms for delivering them have impact on health outcomes and are able to achieve high coverage.

In 2002, the Global Consultation on Child and Adolescent Health and Development: A Healthy Start in Life³ was held in Stockholm, and the United Nations' General Assembly Special Session (UNGASS) on Children took place in New York. Both were intended

to recreate a momentum for child survival. In addition, the adoption of the Millennium Development Goals, and global initiatives such as the Millennium Development Project, the Poverty Reduction Strategies, the Global Fund for AIDS, tuberculosis and malaria, and political commitments such as the Abuja Declaration⁴ are offering new opportunities to accelerate progress towards greater impact on child survival and development.

In this context, it became urgent to define more clearly the role of the IMCI strategy in improving child health and draw lessons from the experience gained to date in order to refine the strategy to achieve greater impact. It was also necessary to identify any additional actions required to meet children's needs for improved health and development. DFID, UNICEF, USAID, and WHO joined forces to conduct an Analytic Review of the IMCI strategy as a whole. A broad consultative process was established to ensure that the full range of experience and evidence related to child health was taken into account and to build consensus about any revision of the strategy, as a basis for future partnerships in research, development, and implementation.

¹ An average 62% ORT use rate in diarrhoea episodes during 1995-2000 was reported in 2001 State of the World's Children, UNICEF and an unpublished synthesis of DHS data up through 2003 shows a 66% average ORT use rate in countries with DHS data.

² How many child deaths can we prevent this year? Lancet 2003, vol 362, pages 65-71

³ A healthy start in life, global consultation on child and adolescent health and development, WHO/FCH/CAH/02.15

⁴ Abuja Declaration and Plan of Actions by the African Heads of States and Governments on Roll Back Malaria, Abuja, Nigeria, April 2000.

Objectives and scope

Partners agreed that the review would be child-centred and forward-looking, in order to:

- Define the contributions of IMCI strategy in responding to children's needs for improved health and development
- Provide information to refine the IMCI strategy and implementation approaches for achieving greater coverage and impact of IMCI on child health outcomes ("scaling up strategies")
- Provide input to discussions on investment strategies for child health and development for countries, partners and WHO.
- Understand how WHO, partners and countries can better support and coordinate the range of actions needed to meet children's needs for improved health and development

The Multi Country Evaluation (MCE) is being conducted to determine the effectiveness, cost, impact, and cost-effectiveness ratio of IMCI, using different but complementary designs, ranging from close-to-efficacy to effectiveness. The final results of the MCE are expected to be available by 2005.

This analytic review focused on understanding how the IMCI strategy was implemented in selected countries, what its contributions to child health were and what actions are needed to meet the needs for child survival, health and development in the context and reality of child health and health care in countries. The review also took into account the Millennium Development Goals (MDGs) and international initiatives such as poverty reduction strategies (PRSP), or the Highly Indebted Poor Countries' Initiative (HIPC). The AR considered IMCI implementation from inputs to outcomes and looked at basic assumptions underlying IMCI in relation to:

- policy issues, management, and organisation;
- the "definition" of IMCI;
- the three components of the strategy and their content;
- the place of IMCI in addressing remaining child health and development challenges;
- the linkages between IMCI and other child health related programmes;
- the implementation process including the adequacy of available tools; and
- the partnership and financial resources made available for IMCI in countries and at international level.

4.1 Key questions and activities

To meet its objectives, the AR sought answers to a set of key questions related to the experience of selected countries. The key questions were aimed at producing a picture of IMCI and the context in which it was being planned and implemented. The same questions guided information gathering throughout the analytic review process as outlined in the following sections of this document. A full description of the information framework agreed upon with partners is available in a separate document¹. The key questions comprised:

- In what context was IMCI currently being implemented?
 - What was the current child health situation in countries, including the major determinants, and the major remaining challenges?
 - What were the socio-economic and health system environments in which child health care, including IMCI, was being implemented?
- What were the major national health policies affecting child health and what was the place of IMCI in these policies?
- How were the major child health activities organized, managed, and institutionalised?
- What were the existing mechanisms and types of coordination for child health-related programmes, including IMCI?
- What were the financial resources made available for the major child health activities, including IMCI, at national and international levels?
- What was IMCI and how was it implemented in the country?
- How did IMCI contribute to improved child health outcomes?
 - What was the contribution of IMCI in improving the quality of care for sick children?
 - What was the contribution of IMCI in strengthening the health system?
 - What was the contribution of IMCI in strengthening family and community interventions for improved child health and development?
- What was the perception of IMCI by the relevant people and implementing partners in countries and at global level in relation to the major child health issues?
- What were the plans for scaling up specific child health interventions, including IMCI?

A set of desk review activities, key informant interviews and workshops during country visits were designed to answer the analytic review questions. The process was iterative, each activity being informed by the findings of those that had been completed.

As expected, when multiple sources of information were consulted, the AR team encountered discrepancies in child health indicators, their definitions and measurements. The mix of AR activities permitted these discrepancies to be highlighted and discussed.

4.2 Desk review

The desk review extracted information from formal sources available internationally (e.g., Demographic

¹ Analytic Review of the IMCI Strategy, proposed process and information framework, June 2002, WHO/FCH/CAH/03.8 and <http://www.who.int/child-adolescent-health>

and Health Surveys, Multiple Indicator Cluster Surveys) as well as less formal documents provided by countries, WHO and partner organizations.

4.3 Country visits

Review teams consisting of at least one senior consultant from at least three of the agencies involved in the analytic review visited each of the countries for six to nine days. Local staff from the agencies involved in the AR supplemented the visiting teams. The composition of the visiting teams is available in Annex 1.

The activities in the countries comprised:

- The validation of the information collected through the desk review conducted at global level prior to the visit (see above) and an additional desk review of documents available within the country.
- Semi-structured interviews with key informants by teams of interviewers from at least two different agencies. These interviews provided a less formal view enriched by individual perceptions of the country situation. The number and types of key informants within each country are shown in Table 1.

- A three-day workshop following a standard agenda (available in Annex 2), including national and district representatives from various departments of the Ministry of Health, local representatives of partners in child health (national or international agencies, bilateral cooperation, NGOs, etc), selected representatives of the private sector providing health care or commodities, and representatives of medical or paramedical teaching institutions. The number and types of participants in each workshop are available in Table 2.

The country visits aimed not only to gather information for the review but also to stimulate discussions on effective action to address child health issues, including possible modifications to IMCI, the feasibility of scaling up implementation of some or all of the IMCI activities, and mechanisms for improved coordination of child health actions.

All activities followed the agreed information framework. Standard checklists were developed to help countries gather appropriate information for the workshop and guide interviewers (see Annexes 3 and 4). In each country at the end of the workshop, participants discussed and agreed on the conclusions. The AR team prepared summaries of all interviews conducted in the country and a report of the visit in-

Table 1 Number and types of key informants interviewed in each of the countries included in the AR

| | Peru | Egypt | Indonesia | Kazakhstan | Zambia | Mali |
|---|--|---|--------------------|--------------------|--------|------|
| Central-level staff(senior MoH officials, child health and other related programme managers)* | 3 (no specific progr in MoH except TB and EPI) | 6 | 5 | 4 | 8 | 5 |
| District health team/staff | 5 | Group discussion** (district and governorate) | Group discussion** | Group discussion** | 1 | 3 |
| Professionals & teaching institutions | 6 | 3 | 3 | 3 | 3 | 1 |
| NGOs | 3 | 1 | 5 | 2 | 1 | 1 |
| Funding partners | 2 | 1 | 3 | 1 | 3 | 2 |
| UNICEF/WHO | 2 | 2 | 3 | 1 | 2 | 3 |
| TOTAL | 21 | 17 | 19 | 11 | 18 | 15 |

* Included IMCI focal person, representative(s) of immunization programmes and child health related programmes such as malaria, nutrition, HIV/AIDS, etc...

** As time and financial constraints did not permit travel to districts, district staff who attended the workshop were interviewed during evenings or immediately after the workshop

Table 2 Number and types of participants in country workshops (excluding AR team members)

| | Peru | Egypt | Indonesia | Kazakhstan | Zambia | Mali |
|--|------|-------|-----------|------------|--------|------|
| Central-level staff (senior MoH officials, child health and other related programme managers)* | 9 | 6 | 7 | 7 | 7 | 5 |
| District health team/staff | 9 | 1 | 11 | 7 | 6 | 3 |
| Professionals & teaching institutions | 5 | 3 | 5 | 9 | 3 | 2 |
| NGOs | 5 | 1 | 3 | 4 | 3 | 3 |
| Funding partners | 3 | 1 | 3 | 1 | 5 | 3 |
| UNICEF/WHO | 4 | 4 | 4 | 3 | 4 | 5 |
| TOTAL | 35 | 16 | 33 | 31 | 28 | 21 |

cluding the workshop conclusions. A synthesis of relevant information extracted from the desk reviews was also included as well as country interviews, and the AR team perceptions about child health situation and IMCI in the country. Before leaving the country the AR visiting team debriefed with senior officials from the Ministry of Health.

4.4 Country selection

The priority criterion for selection was the country experience with IMCI:

- Country having reviewed its early experience and having planned for expansion; or
- Country reporting high coverage for one or more components of the strategy; or
- Country having initiated IMCI three or more years prior to the analytic review but with limited progress.

Other selection criteria agreed upon included:

- Specific issues and/or achievements (e.g., inclusion of IMCI in nation-wide social security system in Bolivia, community-run health facilities in Mali, wide coverage of community interventions in Madagascar, or distance learning methods for first-level health workers in Indonesia);
- Proposals from WHO Regional Offices and partners;
- Countries' willingness and availability;
- Presence of WHO and/or partners' staff on the ground; and

- Availability of funds to conduct the AR.

Based on information available at the beginning of 2002 and the agreed upon selection criteria, a short list of potential countries was prepared. The list included Bolivia, Brazil, Egypt, Ethiopia, Honduras, Indonesia, Kazakhstan, Madagascar, Mali, Mongolia, Nepal, Niger, Pakistan, Peru, Philippines, Tanzania, Uganda, and Zambia.

After further discussions with WHO Regional Offices and taking into account country availability of national staff, time and budget constraints, the Analytic Review Steering Committee decided to include the following six countries in the review: Zambia, Indonesia, Egypt, Mali, Kazakhstan, and Peru.

Initially it was thought that it would be possible to conduct a desk review of available documents for a few countries in addition to the six countries to be visited, but this was not possible due to time and budget constraints.

4.5 Interviews of key informants at global level

Semi-structured interviews were conducted with key informants at global level. Depending on the field of expertise of the interviewees, selected aspects of the information framework were discussed more in depth.

Potential key informants were selected on the basis of suggestions made by the WHO regional or country offices, national governments and implementing

partners and information gaps identified during the desk review and the country visits. As with the interviews of key informants in countries, the interviews were conducted by AR team members from two or more different organizations. A written summary was prepared for each interview.

One or more senior staff members from the following institutions were interviewed: AED-SARA Project, the American Red Cross, BASICS-2, the CORE Group, GAVI, the Global Fund, RBM, UNEF, UNICEF, URC Quality Assurance Project, USAID, The World Bank, and WHO.

4.6 Data analysis and report

There has been ongoing analysis throughout the review with regular feedback to the AR Steering Committee. A small technical group, including all agencies, performed the data analysis based on the key analytic review questions and the information framework.

Preliminary findings were presented to implementing partners, WHO headquarters staff and selected WHO regional and country staff during an informal meeting on preliminary findings from the MCE and the AR held in Geneva, on 4 and 5 February 2003. A preliminary report was reviewed by implementing partners, WHO headquarters, regional offices, and

selected country offices, and external reviewers. After the review, additional analysis was conducted to validate and re-organize the data for presentation of additional information in the report.

4.7 Staffing and support

An interagency Steering Committee was created to guide the Analytic Review process, support decisions, and endorse the findings and recommendations. The Steering Committee included senior staff from DFID, UNICEF, USAID, and WHO. It met for the first time in Stockholm on 13 March 2002, immediately after the Global Consultation on Child and Adolescent Health and Development, then periodically to review and guide the process.

Technical staff from the different agencies, joined when necessary by consultants recruited for this purpose, designed the process, developed the information framework, participated in the country visits, analysed the data, and formulated preliminary conclusions and recommendations. WHO/CAH provided the secretariat and planned for the country visits in collaboration with WHO regional and country offices. Details of the AR teams and Steering Committee are available in Annex 1.

This review has been possible thanks to the financial support provided by DFID, USAID, and the WHO.

While the primary purpose of the AR was to provide a better understanding to WHO and partners of the role of IMCI in improving child health outcomes and contributing to the MDGs, countries also welcomed the AR process and found its broad approach to child health useful. Two countries (Indonesia and Zambia) planned follow-up activities after the departure of the AR teams and Mali used the conclusions of the analytic review workshop for its IMCI review and plans for expansion.

This section brings together findings from the desk review, the interviews and workshop discussions in countries, and the opinions of informants at global level. Findings have been organized according to the key analytic review questions and countries have been ordered in the tables in ascending order of their child mortality. There were noticeable differences in perceptions of child health problems and of IMCI between professionals in countries and those at the global level. To better highlight these differences the opinions expressed by informants at global level have been regrouped at the end of this section.

5.1 In what context was IMCI being implemented?

5.1.1 What was the current child health situation in the six countries, including major determinants and remaining challenges?

Although there has been good progress in the past 20 years, the decline of mortality in children below five has slowed and there remains an unacceptable level of child mortality in many developing countries. This general situation was reflected in the six AR countries: four reported improvements in their national child mortality rates, one reported slight improvement, and one reported worsening figures over the last five years.

Child mortality in all the AR countries was predominantly caused by pneumonia, diarrhoea and conditions occurring during the first month of life. In those countries where mortality from pneumonia and diarrhoea had diminished, neonatal mortality was assuming a greater proportional importance. Malaria was the first cause of death in the two sub-Saharan Afri-

Table 3 Selected mortality rates and trends over last 5 years

| | Peru | Egypt | Indonesia | Kazakhstan | Zambia | Mali |
|--|-------|-------|-----------|------------|--------|------|
| Under-five mortality (U5M) per 1000 live born | 47 | 54 | 58 | 71* | 168 | 229 |
| % reduction in U5M (last DHS compared to the previous one) | 20.3% | 33.3% | 28.4% | -35.2% | 14.7% | 3.8% |
| Infant mortality, IMR (per 1000 live births) | 33 | 44 | 46 | 62* | 95 | 113 |
| % reduction in IMR (last DHS compared to the previous one) | 23.3% | 30.2% | 19.3% | -35.5% | 12.8% | 7.4% |
| Neonatal mortality as % of U5M | 38% | 44% | 37% | 48% | 22% | 25% |

Countries listed in ascending order of under-five mortality. Sources: Egypt DHS 2000 (& 1995), Indonesia 1997 (& 1992), Kazakhstan DHS 1999 (& 1995), Mali EDSIII 2001 (& 1995), Peru ENDES 2000 (& 1996), Zambia DHS 2001 (& 1996).

* DHS estimates are based on a different definition and therefore are higher than national estimates (29 and 22/1000)

Table 4 Selected child health indicators and trends over last 5 years

| | Peru | Egypt | Indonesia | Kazakhstan | Zambia | Mali |
|---|---------------------------|---------------------------|---------------------------|-------------------------|---------------------------|-----------------------------|
| Nutritional status | | | | | | |
| Stunted | 25% | 19% | 30-40% | 10% | 47% | 38% |
| Wasted | 1% | 3% | 8-14% | 2% | 5% | 11% |
| | unchanged | improving | ? | improving | worsening | stunting-up wasting-down |
| Under five children with anaemia | 50% | 30% | 55% | 36% | 65%** | NA |
| 12-23 month old children fully immunized (Previous DHS) | 66% improving (53%) | 92% improving (79%) | 55% improving (50%) | 81% unchanged (?) | 70% worsening (78%) | 29% worsening (32%) |
| Deliveries attended by skilled personnel | 59% improving | 61% improving | 43% improving | 99% unchanged | 43% worsening | 41% unchanged |
| HIV/AIDS prevalence in general population | <1% worsening* | 2% worsening* | <1% worsening* | <1% worsening* | 16% worsening* | 2% worsening* |

Egypt DHS 2000 (& 1995), Indonesia DHS 1997 (&1992), Kazakhstan DHS 1999 (& 1995), Mali EDSIII 2001 (& 1995) and World Bank/HNP 2000, Peru ENDES 2000 (& 1996), and Zambia DHS 2001 (& 1996)

* Based on latest DHS only and additional information available at country level from HIV/AIDS programmes and other studies

** Baseline study on prevalence and aetiology of anaemia in Zambia, Luo et al., 1999

can countries included in the AR. HIV/AIDS in Zambia and accidents/ injuries in Egypt, Kazakhstan and Peru were the other emerging causes of death.

Malnutrition was a widespread problem, affecting 10 to 47% of the under-five population in the AR countries. A high reported prevalence of anaemia was found among children and their mothers in all six countries.

In Zambia, at the time of the review, the reported prevalence of HIV/AIDS in the general population was 16%. In the other AR countries HIV/AIDS prevalence was an increasingly important underlying condition, but was still seen as a concern more for the future than the present.

National mortality estimates hide significant inequities. Socio-economic, geographic and cultural inequities were important determinants of child health and development in the AR countries. For example:

- *Economic*, as in Egypt, Indonesia, and Peru, where the under five mortality rate in the poorest quintile was 3.8 to 4.4 times that in the richest quintile (World Bank/HNP 2000 and DHS). Further, in Peru, while the national under-five mortality rate improved, it had worsened in the two poorest quintiles of the population (ENDES 1996 and 2000).

- *Ethnic*, as in Kazakhstan, where the under-five mortality rate is estimated to be 1.6 times higher for ethnic Kazakh children than for ethnic Russian children (68 compared to 44 per/1000, DHS 1999).
- *Geographic*, as in Peru where the infant mortality rate in rural areas was about twice that in urban areas (53 compared to 27 per/1000, ENDES 2000). Similar geographic differences were reported in Egypt.
- *Geographic and cultural*, as in Indonesia, where children living in some areas of the Eastern part of the country were three times more likely to die under five years of age than those who lived in most areas of the Western part of the country.
- *Educational and cultural*, as in Mali, where the under-five mortality rate in children whose mothers have had no school education is 1.3 times higher than when mothers have had primary education and 2.6 times higher than when mothers have had secondary education. The low status of women was recognized as a barrier to their participation in decisions on their own and children's health (EDSII 1996 and EDSIII 2001).

In all countries infant mortality was lower for children whose mothers had received both antenatal care and assistance at delivery from trained medical providers (e.g., Egypt DHS 2000, Mali EDSII 1996, etc.). Other child health determinants in the six AR countries included access to safe water and sanitation, access to referral facilities, low social and economic status of women, teenage pregnancies, language barriers (e.g., Indonesia, Kazakhstan, Mali, Peru) and environment hazards (e.g., Kazakhstan).

5.1.2 What were the socio-economic and health system environments in which child health care and IMCI activities were being implemented?

Socio-economic environment

Economic crises have major impact on household incomes, hence on the health of the population. The Asian economic crisis of 1997 pushed 48% of the population of Indonesia below the national poverty line¹ and was accompanied by a 32% reduction in children's attendance in public facilities and an increase in malnutrition (wasting) and anaemia. Kazakhstan suffered a drastic decline in GDP in the mid-1990s following the dissolution of the Soviet Union affecting child health activities.

Inequities were found to some extent in all six countries and poverty was widespread. Studies conducted

in Mali², for example, suggested that poor households tend to have more children, resulting in lower standards of living and increased vulnerability to illness. The same study showed that the older and less educated the head of household was, the greater the household's risk of poverty.

Governments in the AR countries have responded to the inequities in health in different ways:

- *Improving access to health services* by building more first level health facilities, especially in less developed areas. Mali built 557 Centres de Santé Communautaires (Cscoms) over the previous five years, but the development of human resources for health lagged behind the construction of facilities, many of which could not find the staff or the resources to remain operational. Peru had also increased its number of health facilities over the previous decade, with a positive effect on access to health services and on health outcomes for the most deprived populations³.
- *Prioritizing the most needy sectors of the population* when planning for interventions. Egypt put greater emphasis on the poorer governorates when introducing IMCI. Kazakhstan had a policy of giving special attention to rural areas, where mortality rates were highest. Indonesia gave extra attention to special development ar-

Table 5 Selected socio-economic and mortality indicators

| | Peru | Egypt | Indonesia | Kazakhstan | Zambia | Mali |
|--|------------|------------|-----------|------------|------------|------------|
| \$GDP per capita * | 2,053? | 3,635 | 3,043 | 5,871 | 0,350? | 0,234 |
| % population < national poverty line * | 49 | 23 | 27 | 14 | 86 | 91 |
| % population < US\$ 1 per day * | 15.5(1996) | 3.1(1995) | 7.7(1999) | <2(1996) | 63.7(1998) | 72.8(1994) |
| U5M ratio poor/rich quintiles ** | 4.4(2000) | 3.8 (1996) | 3.7(1997) | 1.3 (1995) | 1.6 (1997) | 1.8 (1996) |
| Adult literacy rate * | 89.9% | 55.3% | 86.9% | 98% | 78.1% | 41.5% |

Sources:

* UNDP Report on Human Development and World Bank/WDI 2002

** DHS

¹ Indonesia Central Bureau of Statistics, December 1998, and USAID 2002

² Observatoire du Développement Humain Durable, Bamako, Mali, 1998

³ Valdivia M., Public Health Infrastructure and Equity in the Utilization of outpatient Health Care Services in Peru, Health Policy and Planning, 17 (suppl 1): 12-19

reas but the decentralization of health services made it difficult to target the disadvantaged population in other districts. Peru had prioritized less developed areas for selected community interventions.

- *Introducing insurance systems*, as in Peru where it was targeted initially towards the most vulnerable groups, and currently is being expanded to other sectors of the population. In Indonesia, an insurance scheme covered 19% of the population, mainly in the richest quintiles.

Health system environment

Health system capacities are often a reflection of the overall development of the countries (UNDP report on Human Development and World Bank/WDI 2002).

Among the AR countries, Egypt had a well-funded and centrally managed health system. Kazakhstan initiated a shift from a highly centralized and hospital-based health system towards a less centralized and more primary health care focused system with out-

reach activities. Zambia had reached an advanced level of decentralization of its health system management while Peru, Indonesia and Mali were getting progressively decentralized.

In Egypt, Indonesia and Kazakhstan, government health centres exist throughout the country. Despite a noticeable improvement in access to government health facilities by the construction of new infrastructures in Mali (557 new CSCOMs built over the previous five years) and Peru (public health facilities increased from approximately 2000 to approximately 7000 over the past decade), in 2001 only 40% of the population was estimated to live within 5kms of a health center in Mali and about 25% of the population had no access to health care, mainly in the rural and remote areas in Peru.

Access to referral facilities is almost universal in Kazakhstan. There is a high rate of unjustifiable and prolonged hospital admissions. This can be attributed to free treatment at the referral level, budgetary incentives for admission, legal requirements and the fear of punitive actions in case of complications.

Table 6 Health system, access, and utilization of health care

| | Peru | Egypt | Indonesia | Kazakhstan | Zambia | Mali |
|--|---|--|--|----------------------------|---|--|
| Major providers of first level treatment | 40% by public sector (urban poor and rural) | >60% from private providers | Public sector (rural areas). Shift to private care in cities | Public sector | Govt. provides Basic Health Package of services 40% of health facility care by NGOs Private sector very small | Public sector (CSCOMs). Private sector very small and only in cities |
| Current status of decentralization of health care management | Quite decentralized | Decentralization limited to a few facilities | Quite decentralized | Decentralization initiated | Highly decentralized | Quite decentralized |
| Access to public health system | Good About 75% population | Very good 95% population | Good | Good | Poor | Poor |
| Children with diarrhoea who received care from a public facility * (Poor/rich ratio) * | 27% (1.232) | 14% (3.674) | 26% (2.197) | 26% (NA) | 41% (1.314) | 11% (0.212) |
| Children with ARI who received care from a public facility * (Poor/rich ratio) * | 39% (1.082) | 17% (1.358) | 34% (1.118) | 46% (NA) | 60% (1.204) | 19% (0.317) |

Sources:

* World Bank HNP 2000

Utilization of health care, including that from public health facilities, was relatively low in all six AR countries according to DHS data. The public sources of care were used more often than private sources in Kazakhstan, Mali, Zambia, and Peru, whereas public health facilities were used less often in Egypt and Indonesia. The population in the poorest quintile used public health facilities more often than in the richest quintile in all countries with the exception of Mali (World Bank HNP 2000).

Cost of care was one of the major constraints to health care utilization and there was some form of user fees for health services in all countries:

- Although Indonesia was recovering from the 1997 economic crisis, country workshop participants reported a continued low utilization of health services in some areas due to rising costs.
- Kazakhstan provided all public health services free of charge, but country workshop participants reported that “informal payments” constituted a barrier to access for poor families and that utilization rates were decreasing.
- Peru reported problems of economic access to essential drugs.
- User fees were a major barrier in Mali and in some areas utilization was so low that it deprived health centres of the minimum funds they needed to sustain staff and drug supplies.

The other major barriers for health care utilization regularly mentioned were high transport costs to and from clinics, poor information available to households, behavioural and cultural barriers, absence of drugs in the facilities, and perception that the quality of services was poor.

All the AR countries were facing problems with the quantity and quality of their human resources for health and suffering from high turnover of front line health workers. HIV/AIDS was taking a high toll on human resources for health in Zambia where up to 10% of the health work force had been lost through chronic illness or death over the previous year.

NGOs active in health were present in all six AR countries, whether in limited (e.g., Egypt) or large numbers (e.g., Mali). The majority of them delivered curative care through health facilities in a manner similar to the public health sector (e.g. user fees and national treatment guidelines). Many NGOs were also active at community level.

The importance of the private for profit health sector in the delivery of preventive and curative cares for children varied across the six AR countries. In Egypt, an estimated 60% of sick children seeking care had at least one contact with private providers. In contrast, private health care in Mali and Zambia was very limited and restricted to the capital cities. In all countries, governments seemed to face difficulties in regulating private-for-profit health care delivery, whether through quality control, accreditation mechanisms, or setting up norms and standards (Indonesia, Mali, and Zambia).

In Kazakhstan the national health policy had given responsibility for drug supplies largely to the private sector. In Mali there had been discussions about possible public-private partnership (USAID and WB projects to provide health commodities). In general however, the potential role of the organized private sector, including health care delivery and the provision of health commodities, was not taken into account in a systematic manner in national health plans.

The analytic review team found external donors supported projects targeting the private health sector. These projects were often of limited scale and were sometimes unclear about the definition of “private” (non-profit and NGO vs. for-profit, distribution of commodities vs. delivery of care).

Policy environment and international initiatives

In the six countries visited by the AR team, there were many national policies and strategies and international initiatives that could have a potential effect on child health outcomes.

All the AR countries had *national health policies*. These policies gave some priority to the health of women and children, particularly for immunization, essential drugs, and family planning. Indonesia was developing a comprehensive child health policy, using the new WHO Strategic Directions for Improving the Health and Development of Children and Adoles-

cents¹ as a basis. Zambia, Indonesia and Egypt suggested that such a comprehensive child health policy could help set priorities and coordinate the inputs of concerned programmes and partners, and facilitate the identification of norms and roles for the private sector.

Decentralization of health service management was a major mechanism of the health sector reform projects in five of the AR countries. Its effect on child health outcomes² was unclear. The AR noticed that decentralisation could:

- Create opportunities for bringing decisions and resources closer to the users and for facilitating targeted action to the most needy.
- Increase budget available at district level although the discretionary funds available to address local priorities were often limited, opening the door to parallel disbursements by some donors (Zambia). In Indonesia, all central transfers to the districts were for salaries and accounted for 85% of health centres' expenditures. The remaining 15% of the budget came from provinces and districts but its small size precluded local authorities from engaging in intensive child health programmes (World Bank, 2000). In Mali, although the overall health budget increased in absolute terms, resources going to regions and districts declined from 17.4% in 1996 to 16.7% in 1999 while central MOH budget increased from 41.4 to 47.9% in the same period (World Bank, 1999).
- Sharply reduce the technical capacity and role of the central level in coordinating inputs, supervision, and procurement and distribution of commodities, including drugs and supplies.
- Weaken the compliance of the operational levels with national policies and guidelines relating to child health.

- Break down the transmission of information from the districts to the centre, affecting the use of monitoring data for planning,
- Over-emphasize the organisation of the system rather than the health outcomes, a problem that had been recognized and was being addressed in Zambia.
- Ignore inequities in health in the formulae used for resource allocation to the peripheral level.
- Be effective only if there is capacity for planning and using decentralization mechanisms at district level. Otherwise, more influential local politicians may take a disproportionate share of public resources³, causing inequity in itself (Indonesia, Mali, Peru and Zambia).

The *Highly Indebted Poor Countries' initiative* is intended to enable debtor governments to substantially increase resources devoted to reducing poverty through increased spending on health and education. This initiative may or may not free money depending on the state of the national economy. Its impact on child health depends the national capacity to follow the procedures for the release of HIPC funds and on how these resources are spent. Mali, for example, had planned to use these funds to purchase and distribute bednets.

Mali, Zambia and Kazakhstan had or were in the process of developing *poverty reduction strategies*. The importance given to child health within those strategies varied across countries and was surprisingly limited except for raising immunization rates. An analysis of 18 African countries on the HIPC programme showed that none of them made any commitment to reduce the incidence of diarrhoea and ARI⁴. There were no clear links between PRSPs and the Millennium Development Goals.

¹ Strategic Directions for Improving the Health of Children and Adolescents. Document endorsed by the World Health Assembly 2003. WHO/FCH/CAH/02.21rev1
² Ugalde A., Homedes N., *Descentralizacion del sector salud en America Latina*, Gaceta Sanitaria, 16(1): 18-29, 2002 Jan-Feb
³ Murgueytio P., *Decentralization and Health: How to Protect Priority Services*. Presentation at the USAID Latin America and the Caribbean State of the Art Course, Miami, USA, 2002
⁴ World Bank, 2001

The extra resources brought by the *Global Fund* were welcomed in countries, but there were concerns about the management and reporting mechanisms often being set up in parallel to existing country mechanisms. Concerns were also expressed about the countries' absorption capacity and the heavy administrative requirements for project preparation, which had taken scarce central-level staff away from their duties for long periods of time in Mali and Zambia.

The growing influence of disease-specific global initiatives may inadvertently hurt child health activities. This may be of limited concern when the disease-specific funds address a health priority (e.g., RBM and GF money for malaria in Zambia or GAVI funds in Mali) or worrisome when disproportionately high funding is allocated to health issues that are not the highest priorities in the country (e.g., HIV/AIDS and possibly malaria in Indonesia).

The *Millennium Development Goals* have been endorsed by 189 countries in September 2000. Although now mentioned as a top priority by many, UN agencies and implementing partners have been relatively slow in promoting the MDGs in countries, especially in the health sector. At the time of the AR, the MDGs were not seen as a driving force for child health activities in the countries yet. They were still perceived as international rather than national goals and the proposed indicators were not considered sensitive

enough for child health programming in countries. The urgent need for actions for reaching the health related MDGs is expected to influence country planning soon.

5.1.3 What were the financial resources made available for child health programmes?

Information on financial flow specifically dedicated to child health or to specific interventions was rarely available in the AR countries. Nevertheless, looking at overall trends in financial flow for health at global, national, and household levels provided some insights on the financing of child health programmes. A more detailed report on child health financing is available in a separate AR document¹.

Official development assistance

Official development assistance (ODA) going to the social sector gained ground over the past two decades. Its share increased from 24.6% in 1980-81 to 34.4% in 2000-01, according to the OECD (2003). Within the social sector, however, aid for health was quite small as shown in Table 7.

From 1998-2000, Primary Health Care (PHC) accounted for only around 3-5% of the total annual health aid flows in Indonesia, Kazakhstan, and Peru, though higher shares were reported in poorer coun-

Table 7 Official Development Assistance to the Health Sector and Primary Health Care, 2001

| Items | Bilateral | | Multilateral | | Total | |
|--|-----------|-------|--------------|-------|--------|-------|
| | US\$B | % | US\$B | % | US\$B | % |
| Total ODA | 35.022 | 100.0 | 17.314 | 100.0 | 52.336 | 100.0 |
| Of total ODA portion going to social and administrative infrastructure | 11.34 | 32.4 | 6.63 | 38.3 | 17.97 | 34.4 |
| Of total ODA portion going to health | 1.44 | 4.1 | 0.47 | 2.7 | 1.90 | 3.6 |
| Of total ODA portion going to PHC | 0.84 | 2.4 | 0.21 | 1.2 | 1.05 | 2.0 |

Source of basic data: OECD website, 2003.

Note: Total ODA refers to disbursements while the details refer to commitments. The OECD website reports total disbursements but does not report disbursements by sector. On the other hand, it reports the share of commitments by sector, but does not report their values, which were derived from the reported disbursement shares.

¹ Child Health Financing and Cost-Effectiveness: Supplement to the Report on the Analytic Review of IMCI, 2003.

Annual Average ODA Commitments to Health Interventions and Health System support by top 10 donors in AR Countries

Table 8

| | Peru | | Egypt | | Indonesia | | Kazakhstan | | Zambia | | Mali | |
|--|-------|------|-------|------|-----------|-----|------------|-----|--------|------|-------|-----|
| | US\$M | % | US\$M | % | US\$M | % | US\$M | % | US\$M | % | US\$M | % |
| Health Interventions | | | | | | | | | | | | |
| PHC (including child health) | 2.0 | 3.9 | 8.1 | 9 | 4.4 | 3 | 0.5 | 4 | 5.5 | 13.0 | 5.3 | 18 |
| HIV/AIDS and reproductive health | 4.6 | 9.0 | 13.6 | 15 | 14.6 | 10 | 1.4 | 11 | 9.3 | 22.0 | 3.8 | 12 |
| FPand population | 10.2 | 20.0 | 19.1 | 21.1 | 17.5 | 12 | 0.7 | 5 | 5.1 | 12.1 | 3.8 | 12 |
| Infectious diseases | 2.0 | 3.9 | 5.4 | 6 | 7.3 | 5 | 0.9 | 7 | 3.4 | 8.0 | 0.6 | 2 |
| Health Systems | | | | | | | | | | | | |
| Medical service, training and research | 10.2 | 20.0 | 0.9 | 1 | 20.5 | 14 | 2.8 | 22 | 0.4 | 0.9 | 0.0 | 0 |
| Health policy and administration | 18.3 | 36.0 | 38.9 | 43 | 39.5 | 27 | 2.0 | 15 | 16.9 | 40.0 | 15.3 | 52 |
| Health infrastructure | 3.6 | 7.1 | 4.5 | 5 | 42.4 | 29 | 4.3 | 34 | 1.7 | 4.0 | 0.6 | 2 |
| Commitments of top 10 donors | 50.9 | 100 | 90.5 | 100 | 146.2 | 100 | 12.6 | 100 | 42.3 | 100 | 29.4 | 100 |

Source of basic data: OECD website, 2003. Totals are rounded figures.

tries such as Mali (18%) and Zambia (13%). Financial support for HIV/AIDS far exceeded PHC, even in low-prevalence countries such as Egypt, Indonesia, and Peru. General health policy and administration emerged as a major recipient, accumulating as much as 40-50 percent of health ODA in Egypt, Mali and Zambia. This probably reflected the global trend towards sector wide approaches and less specific support to child health.

There were no available summary statistics on the global funding for child health over time. Nevertheless, among six important partners in child health (the five partners involved in the AR and CIDA), two showed declining resources for (child) health. CIDA's annual disbursements for health declined by 7.8 percent from 1994 to 2000. For the World Bank, the annual number of newly approved health projects with child health components fell from 12 in 93 to only seven in 99, as more health projects followed the sector wide model that does not provide specified funding for child health. DFID funding for population and health increased significantly in the late 1990s,

but there was also an increasing institutional interest to move funds through broader sector wide approaches, rather than specific interventions. USAID continued to be a major global funder of child health, with a modest increase in commitments since 1997. However, according to USAID staff, child survival funding for Africa was falling as additional resources were being taken by HIV/AIDS and other infectious diseases.

International private assistance

Large NGOs have emerged as important sources of funding for child health, or fund conduits of bilateral donors. Over the period 1997-2001, there was a tremendous expansion in the resources devoted to international health by such organizations as Africare, the American Red Cross, CARE, Christian Children's Fund, Helen Keller Worldwide, or Save the Children Foundation. Programs devoted to child health have benefited from this overall expansion. For example, CARE-USA's international child health expenditures grew by 70% during the period and Save the Chil-

dren Foundation-US expenditures for primary health care increased by 344.7%¹.

Smaller NGOs, however, showed declining trends for child health expenditures. The global impact on child health of the small NGOs might be considered as negligible relative to their more established counterparts, but they often play a critical role in targeting the most deprived populations in countries.

Although many NGOs receive government grants and contracts, they also increasingly generate significant additional resources on their own through direct and indirect public support (e.g., Oxfam or Médecins Sans Frontières).

National financing

It is difficult to discriminate government financing of child health services from overall health services. However, the AR Team noted the following:

- Child health suffered generally from inadequate government funding. In Mali and Zambia, the poorest countries visited by the AR, governments' budgets were insufficient even to cover the wages of civil servants, much less to provide for recurrent-cost requirements of health programmes. Thus, child health interventions were often left to be funded by donors. Egypt and Peru appeared to have slightly increased their public funds for health, resulting in improved coverage and health status.

- Funding mechanisms for the health sector were becoming more complex with new initiatives and modalities, such as debt relief and associated poverty reduction programmes, public expenditure reform programmes, and other forms of budgetary support introduced by implementing partners. The lack of emphasis of child health in these macroeconomic and sector-wide funding initiatives was often attributed to a lack of knowledge of these new funding mechanisms and a weak planning capacity of the local health authorities.

- The existence of a comprehensive child health policy or strategy could have helped government allocation of greater resources to child health and facilitated the coordination of donor investments.

Household expenditures for health

In the six AR countries, no data were available on specific household spending for child health. However, households did use a significant amount of their resources on out-of-pocket expenditures (OPE) for health. In 2000, per capita OPE for health was as high as US\$25.30 in Egypt and US\$30.90 in Peru (Table 9). Although the levels were much lower in poorer countries, per capita out-of-pocket spending showed an increasing trend over the years in Egypt, Indonesia, Kazakhstan, and Mali. The ratio of per capita OPE for health to the country's average per capita income per day was also high. In 2000, for

Table 9 Indicators of OPE on health, 2000

| | Peru | Egypt | Indonesia | Kazakhstan | Zambia | Mali |
|--|----------|----------|-----------|------------|----------|----------|
| OPE for health (US\$) | 30.90 | 25.30 | 13.32 | 11.79 | 5.12 | 4.83 |
| Per capita income per day (US\$) | 5.75 | 4.08 | 1.56 | 3.26 | 0.82 | 0.66 |
| OPE for health / per capita income per day | 5.4 days | 6.2 days | 8.5 days | 3.6 days | 6.2 days | 7.3 days |
| OPE as % of total health expenditures | 30.9 | 49.6 | 70.1 | 26.8 | 28.6 | 48.3 |

Sources of basic data: Health expenditures were calculated from Annex Table 5 of the World Health Report 2001. Per capita income per day were calculated from per capita GNP as reported in the World Development Report 2001.

¹ Based on financial statements reported in Guidestar.com

instance, an Indonesian would have had to incur 8.5 days' worth of income to pay for health expenses, while a Malian would have had to incur 7.3 days' worth of income.

The large and increasing OPE for health could be explained by the user fees and/or “informal payments”, and by the use of several types of health care providers for the same episode of disease, including private for-profit facilities.

5.2 How were the major child health activities and IMCI organized, managed, and institutionalized?

The AR looked at relationships and possible synergies between the IMCI strategy and other child health interventions that existed before the introduction of IMCI in the six countries visited. These existing interventions included programmes for the Control of Diarrhoeal Disease (CDD), Acute Respiratory Infections (ARI) and Malaria, the Expanded Programme on Immunization (EPI) and nutrition interventions.

CDD and ARI control programmes

All AR countries had well-established CDD, and to a less extent ARI, programmes prior to the introduction of the IMCI strategy. Data from country informants and workshops suggested that IMCI was seen as having replaced ARI and CDD programmes except in Peru and Indonesia. Central level CDD and ARI programme managers were given the responsibility for IMCI activities in Egypt, Kazakhstan and Peru.

In Peru, IMCI was initially introduced along with CDD, ARI and 19 other vertical programmes. Later, all vertical programmes were abolished, with the exception of EPI and TB, and an integrated model for health care was being developed. At the time of the AR, Indonesia had existing programme structures for CDD and ARI but without reasonable budget to allow field activities.

Some districts in Indonesia, Egypt, Kazakhstan and Mali, particularly where IMCI had not yet been implemented, were continuing to organize periodic CDD and/or ARI training but on small scale, and with no national level input or quality control. Several coun-

try informants perceived that some previous activities of CDD and ARI programmes, particularly the community activities, had been largely discontinued in all six countries whether in the IMCI districts or in the non-IMCI districts.

Malaria control program

Malaria programmes and IMCI implementing teams collaborated closely in Mali and Zambia. Malaria programme managers were keen on using the IMCI case management guidelines and training whenever possible and saw community IMCI activities as another promising field for collaboration if those activities could expand rapidly.

EPI

Efforts to strengthen collaboration with immunization programmes had been limited except in Kazakhstan where IMCI training included guidelines to provide safe immunization and the national guidelines on contraindications for immunization.

Coordination of IMCI activities at the central level

There were “IMCI focal points” in all AR countries. Only Egypt had a strong central-level team to coordinate IMCI activities. Mali and Zambia had a one-person unit responsible for child health and IMCI.

With the exception of Egypt, the perceptions of several country informants and from the AR team were that previous CDD and/or ARI programme managers or existing malaria programme managers were in a stronger position within their MoHs than the current IMCI focal points. A weak leadership at national level was cited as a reason for relatively slow progress in IMCI implementation in Zambia.

All AR countries had made an effort to involve other health programmes, and in some cases academic institutions, during the adaptation of the case management guidelines and training materials. This collaboration was described as valuable and stimulated interest in evidence-based clinical recommendations for child health (Egypt, Indonesia, Peru, Zambia).

It proved difficult to maintain this level of collaboration while implementing IMCI, and most of the working and steering groups established at the introduction of the strategy had withered at the time of the

AR. Informants in Indonesia, Zambia and Mali perceived that the IMCI working groups had become non-functional, and that this was affecting implementation.

Although there were mechanisms in the AR countries for coordination of the implementing partners, the AR saw little harmonisation of planning and monitoring mechanisms, or of technical and financial inputs.

Policy and ownership of IMCI by the governments

Peru was developing a model of integrated care in which individual districts would choose their priorities. The model did not promote the IMCI strategy nor advised against it. At the time of the AR, many districts had included IMCI, or parts of IMCI in the context of community activities, in their plans.

IMCI has been endorsed as a key national strategy in Egypt through its inclusion in the Basic Benefit Package, along with immunization services, monitoring for growth and development, and neonatal care.

The central government in Indonesia supported IMCI but had limited capacity to promote its adoption by individual districts in the new decentralized environment.

In Kazakhstan, the Ministry of Health had included IMCI in governmental programmes on Mother and Child Health and in the National Plan on Improvement of Women Status signed by the prime minister.

The 2001-5 Zambian national strategic health plan included IMCI as a strategy for improving the quality of care for children. However, in the highly decentralized process, districts had to decide on specific activities and this decision was often made on the basis of additional funds made available by external donors.

The Ministry of Health in Mali saw IMCI as an “approach” and a set of tools that could contribute to the implementation of the Programme de Développement Sanitaire et Social or PRODESS (five-year development plan, including health).

The perceptions of several informants from all countries, particularly among funding partners, was that the commitment to and ownership of IMCI were relatively weak at central, decision-making, level.

How was IMCI funded and what were the perspectives for the coming years?

IMCI had not been an exception as for previous disease-specific programmes, most of the funding for implementation (especially training) had been from external donors in all AR countries. Several country informants perceived that the dependence on external donors made the activities vulnerable to changes in donor policies. For example, the sudden termination of BASICS1 work in Zambia was perceived by some informants as a major set back for IMCI implementation in the country.

In Egypt, the implementation of IMCI activities was mostly donor funded although the government was covering 8% of the costs at the time of the review. The intention was for IMCI to be absorbed into Government funding eventually, but no date had been fixed.

At the time of the AR visit to Indonesia, of the 144 districts implementing IMCI, only 44 districts were using central/local government funds (including ADB loan), 60 districts were using government and donor funds and 40 districts were using donor funds only.

In Peru, the MoH had a structure and budget specifically for IMCI during the first years of implementation. The recent intensification of the decentralization process and the development of an integrated model for care led to the disappearance of specific programmes and budgets. It was now up to the districts to set priorities and decide to invest in IMCI strategy as a whole or in selected parts of it (e.g., the community component).

In Kazakhstan, health interventions were implemented as integrated functions of the health system and budget lines did not allow for specific interventions like IMCI to be included as a separate entity. It was therefore difficult to estimate current levels of funding and perspectives for IMCI. UNICEF demanded the cost-effectiveness of the IMCI strategy to be demonstrated in the country before committing additional investments in IMCI.

In Mali, the implementation of the IMCI strategy, as well as many other health activities, depended and will keep depending in the near future on external donor support.

In Mali, Zambia, Peru and Kazakhstan, one reason given by funding partners in the countries for not supporting IMCI on a large scale was that Governments did not appear to be giving it enough priority and appropriate investments. However, it should be acknowledged that the ambiguous position of some partners relative to IMCI might also have influenced MoH decisions.

5.3 What was IMCI and how was it implemented in the AR countries?

By the end of 1995, when IMCI was introduced in the first early use countries, it consisted in case management guidelines for the integrated management of childhood illnesses at first-level health facilities and a training course based on these guidelines. Building on this training effort and first country experiences, a three-component strategy was progressively devel-

oped and officially launched at the First Global Review and Coordination Meeting on IMCI, in Santo Domingo, Dominican Republic, in September 1997¹.

Today, IMCI includes interventions that would improve health worker skills, strengthen the health system and improve family and community practices. The following sections describe what IMCI activities were actually implemented in the six countries included in the AR, when they were implemented, and what coverage was reported.

5.3.1 Chronology

The first IMCI related activity in a country was usually an orientation meeting followed by the establishment of a national working group for the adaptation of the case management guidelines. This first implementation phase is usually referred to as the “introductory phase”.

Table 10 Chronology of IMCI activities in the six AR countries

| | Peru | Egypt | Indonesia | Kazakhstan | Zambia | Mali |
|--|--|--|--|--|--|---|
| First IMCI activity in the country | Orientation meeting in 1996 | National working group in 1997 | National working group in 1996 | Regional training course in 1998 | Orientation meeting in 1996 | Orientation meeting in 1996 |
| Adaptation of guidelines | Aug-Sep 1996 | Jan-Aug 1998 | Mid 1996-Jan 1997 | Mid 1998-Dec 1998 | Mar-Apr 1996 | Apr 1997-Mar 1999 |
| Training: early implementation and expansion | 1996 in 6 districts Expansion from 1997 | 1999 in 3 districts Expansion from 2000 | 1997 in 2 districts Expansion from 1998 | 1999 in 2 districts Expansion from 2000 | 1996 in 4 districts Expansion from 1997 | 2000-1 in 5 district Expansion from 2002 |
| Activities to improve health systems (excluding follow-up after training) | Discussion on EDL during adaptation | Discussion on EDL during adaptation Set of activities * conducted prior to training | Discussion on EDL during adaptation |
| Activities to improve family and community practices (C-IMCI) | Activities in 5 districts in 2001-02 | Activities to start in 2002-03 | Activities to start in 2002-03 | Activities started in 2002 | Activities to start in 2002-03 | Activities to start in 2002-03 |

* Activities targeted at improving drug management, strengthening the referral system and organization of work at health facilities, integrating supervision, establishing a case recording system and to build district capacity to manage and supervise implementation of the IMCI strategy

¹ First Global Review and Coordination Meeting on Integrated Management of Childhood Illness, Santo Domingo, Dominican Republic, 9-12 September 1997. WHO/CHD/97.11

During the second implementation phase, the “early implementation phase”, countries adapted the case management guidelines, built training capacity, and gained experience with training of first-level health workers. The time needed for adaptation and consensus building ranged from a few weeks in Zambia and Peru to about two years in Mali. In all countries discussions started during the adaptation process to update the national essential drug list.

Although the first IMCI activities in the AR countries took place four to six years prior to the AR visits, actual implementation at first-level facilities did not start at that time. For instance, training of first-level health workers started only in 1999 in Egypt and Kazakhstan and in 2000-1 in Mali.

With the exception of Peru, the expansion of the training activities occurred after an IMCI review meeting, usually within about one year of early implementation in all countries (Mali conducted a review meeting shortly after the AR visit).

Based on the first country experiences with adaptation and training, IMCI evolved into a three component strategy, although guidelines and tools for the new components were not available yet. This could

explain the limited number of activities to strengthen health systems and the substantial time lag between initiation of training for first-level health workers and the implementation of community IMCI. Community activities were yet to start in Egypt and had only recently started in Indonesia. In Kazakhstan they were limited to health education campaigns. Peru, Zambia and Mali had a range of community activities related to child health pre-existing to IMCI implementation.

5.3.2 IMCI adaptation process and perception of adequacy of case management guidelines for the country

The generic IMCI case management guidelines were developed for health workers in first-level facilities. They focus on the major conditions responsible for child mortality and morbidity in developing countries, and require adaptation to the local epidemiology and treatment standards prior to their implementation.

In all AR countries, there was a consensus about the technical soundness of the nationally adapted case management guidelines and appreciation of their holistic approach to the sick child.

Table 11 The adaptation process and perception of case management guidelines

| | Peru | Egypt | Indonesia | Kazakhstan | Zambia | Mali |
|---|---|--|--|--|---|---|
| Major changes made during adaptation of guidelines | Severe complicated measles removed. Throat problems added | Wheezing, convulsions, throat problems added. First week of life included, jaundice and no bacterial infection added | Dengue Haemorrhagic fever added | Wheezing, throat problems added. Classifications of fever: malaria removed, prolonged fever & possible bacterial infection added | Wheezing and hiv/aids added | No major changes |
| Major changes made in the training process | Duration reduced to 7 days | 4-day competency-based course for nurses | Duration reduced to 6 days | - | - | - |
| Perception on the content of the case management guidelines | Sound Being expanded to address neonatal causes | Sound Need to include care for development | Sound Need to include conditions in the first week of life | Sound Need to include neonatal and perinatal causes, accidents and psychosocial development | Sound Need to include ante-natal care and postnatal care for newborns | Sound very complete and inspiring |
| Perceptions regarding case management process | - | - | Case management too long for busy clinics | - | Case management process too long for busy clinics | Guidelines result in too much referral (estimated at 30-40% of all sick children) |

Countries have introduced new conditions such as sore throat, wheezing, dengue haemorrhagic fever or HIV when adapting the case management guidelines to their settings. The management of illness in the first week of life has been included in Egypt and the management of neonatal conditions was ready for implementation at the time of the AR visit in Peru.

The duration of the standard training course for first-level health workers was reduced to seven intensive days in Peru and six days in Indonesia. Egypt developed a four-day competency-based training for nurses who are not entitled to perform all IMCI tasks. Indonesia experimented distance learning training.

The perceptions of country informants in Peru, Indonesia, Kazakhstan and Zambia were that it was important to include conditions in the perinatal period, as it was a major cause of mortality in the countries.

While the issue was not raised in other countries, informants in Indonesia and Zambia perceived that the IMCI case management process was too long for busy clinics. In Mali, although training coverage was limited at the time of the AR, it was perceived to result in a very large proportion of sick children needing referral, although referral was not feasible in most cases.

5.3.3 Description and coverage of IMCI interventions implemented to improve health worker skills, strengthen the health system, and improve community and family practices

The major IMCI activity implemented in all countries was the training of health workers. In the six countries visited, training coverage of health workers working in first-level health facilities remained limited, and districts (or equivalent administrative divisions) reported as having initiated IMCI, were far from reaching full coverage within their administrative boundaries, except in Egypt. The highest coverage was reported for Peru, where an estimated 10-20% of all health workers in the country had been trained at the time of the AR visit. Districts in almost half of the country were involved in training activities in Indonesia and Zambia and a quarter of them in Egypt and Kazakhstan. The lowest coverage was for Mali, where the training had only been initiated at the end of 2000.

In all AR countries except Egypt, activities to strengthen the health system were limited to including IMCI recommended treatments in the essential drug list for use in first-level health facilities and to conducting follow-up visits to recently trained health workers. The reported coverage of follow-up visits to recently trained health workers was generally very high at the beginning of the training activities in all countries except Indonesia, but then dropped slightly during the expansion phase in Egypt and dropped seriously in Kazakhstan, Mali, Peru, and Zambia.

In Egypt, a series of additional interventions were undertaken to improve drug management, strengthen the referral system and organize work at health facilities, integrate supervision, establish a case recording system and build district capacity to manage and supervise IMCI implementation.

Activities related to community IMCI started much later than the training of health workers in health facilities and the coverage was very low or non-existent in the six AR countries. In addition, IMCI community activities seemed poorly coordinated with activities in health facilities. Activities included training of community health workers in Peru and Zambia and training of community midwives in Indonesia in key health education messages and selected case management practices. In most countries, many “IMCI-like” community interventions were being implemented by partners and NGOs.

Pre-service IMCI training

IMCI has been introduced in the training curriculum of some medical and nursing schools in all countries included in the AR except Mali. The enthusiasm of academic institutions for the IMCI training methodologies was striking.

Country informants in Kazakhstan, Peru and Egypt saw pre-service training in IMCI as a valuable introduction to evidence-based case management and as a way of improving health workers’ attitudes and skills in working with caretakers and families. They perceived that IMCI was valued by students because it gives them confidence in managing children, and in particular, in talking to mothers.

In Indonesia, a full pre-service training course was not perceived to be useful or practical for doctors. Now IMCI training for medical students has been

Table 12 Description of interventions & coverage of the 3 components of IMCI strategy

| | Peru | Egypt | Indonesia | Kazakhstan | Zambia | Mali |
|--|---|---|--|---|--|---|
| Type of training to improve health worker skills | 7-day training for doctors and nurses | 11-day training for doctors, 7-day for paediatres, and 4-day for nurses | 6-day training for health centre staff Distance learning courses developed and tested | 11-day training for doctors and feldshers (Med. Asst.) | 11-d training for nurses, medical staff Training of private providers and traditional healers in 16 pilot districts | 11-day training for CSCOM staff |
| Reported coverage: districts or equiv having initiated training activities at the time of AR visit | 29/34 | 45/226 | 144/350 | 16+6/60+84 (Rayons+cities) | 31/72 | 8/55 |
| Interventions to improve health systems | EDL Follow up after training | EDL Set of interventions * based on district situation analysis | EDL Follow up after training | EDL Follow up after training | EDL Follow up after training DMCI | EDL Follow up after training |
| Reported coverage for follow up after training | Limited and decreasing: 44% of all the trained health workers | Good: 92% of trained workers during early implementation | Limited: not generally planned for, and rarely carried out | Good: 85% during early implementation now decreasing | Good: 80% of all trained health workers | Limited: few health workers had been trained at the time of AR visit |
| Activities to improve family and community practices | National guidelines for CHWs developed Training of CHWs in case management and basic IMCI messages | Baseline survey conducted, community plan outline ** being developed | National generic IMCI guidelines for village midwives developed | Key family practices identified IEC campaigns "Keeping children healthy" | An integrated community health worker training manual developed | Key family practices identified IMCI-like "Approche village" |
| Reported coverage (community-IMCI activities) | A total of 5578 CHWs have been trained No correlation between health worker and CHW training | Plan to cover at least one community in 7 districts in 2003 | Training of community midwives recently started | IEC campaign "Keeping Children Healthy" conducted in 5 cities in 2000 | 1300 CHWs in 12 districts trained | 50 health zones in 18 districts benefited from "Approche village" (currently on hold, lack of budget) |

* Activities targeted at improving drug management, strengthening the referral system and organization of work at health facilities, integrating supervision, establishing a case recording system and to build district capacity to manage and supervise implementation of the IMCI strategy

** Activities include promotion of practices for child health and development, improving caretaker behaviour with regard to appropriate and timely care seeking from appropriate providers, improving caretakers' compliance to treatment and advice for home care, and promotion of a supportive and enabling child-care environment

reduced to a few hours' introduction including a video session and clinical demonstration. Full pre-service training was continuing in nursing and midwifery schools.

Several informants suggested expanding IMCI pre-service training to a larger number of schools as it was thought to be a promising way for sustainability in the long term and for targeting future private providers.

IMCI pre-service training had not yet been implemented on a wide scale in the countries and only a few students had left the training institutions and started working at the time of the review. Consequently, it was too early to assess the possible effect of pre-service training in IMCI on the quality of care delivered to sick children in public or private facilities.

Referral care

The WHO manual for care of children at the first referral¹ level had been adapted and was being made available to hospitals in Indonesia and Peru. In Kazakhstan, the manual was being adapted within the overall project on the revision of national referral protocols.

5.4 What was the contribution of IMCI to child health outcomes?

The AR saw that IMCI in its current form was appreciated and recognized for its holistic approach to the sick child and for its conceptual framework, particularly for community interventions. Implementing partners, ministries of health and teaching institutions saw IMCI as providing a new way of thinking and as a stimulus for change (e.g., Egypt, Mali, Peru). But the understanding of what the three components of the IMCI strategy included and how they could relate to each other varied widely.

Countries and partner institutions valued the standard case management protocols, the training package, and the implementation tools developed for IMCI. However, the limited number of tools for the community (except in Peru) and health system strengthening components available to date was seen as a major lacuna.

5.4.1 What was the contribution of IMCI in improving the quality of care for sick children?

The generic in-service training for first-level health workers in IMCI case management follows an 11-day agenda. Many countries had adapted this package and had developed additional or alternative train-

ing packages and strategies. Some of these alternative training approaches had been assessed in Egypt and Indonesia, but no systematic evaluation comparing the different approaches had been conducted at the time of the AR.

Health Facility Surveys (HFS) were conducted in facilities where IMCI training had been implemented in Egypt (2002) and Zambia (2001), and in both IMCI- and non-IMCI health facilities in Peru (1999). The objectives of these surveys were to assess the quality of care received by sick children attending first-level health facilities, irrespective of the actual IMCI training status of the health care providers present the day of survey (except in Egypt where only IMCI trained providers were observed), and to assess the level of the health system support. Selected findings related to the quality of care are summarized in Table 13.

Data from Peru suggested more thorough assessment of sick children and better counselling in IMCI facilities than in non-IMCI facilities. Although comparison data were not available for Egypt and Zambia, there were indications that the quality of care had improved following IMCI training. In Zambia, for instance, 19% of children with dehydration were correctly rehydrated in a 1997 CDD/HFS, while the corresponding figure in the 2001 HFS was 60%. Caretaker satisfaction in Egypt amounted to 100% and training was perceived to have rationalized drug use. It should be noted that systematic checking for danger signs, nutritional assessment, and correct prescription of antimicrobial or antimalarial treatments needed further improvement in Peru and Zambia.

Similar findings were reported from facility-based evaluations conducted recently in other IMCI-implementing countries not included in the AR, such as Bolivia, Brazil, South Africa, Tanzania, Uganda, and Vietnam.

Where follow-up visits to recently trained health workers were conducted, observations made during these visits showed that quality care was provided by the recently trained health workers. Data and country informants suggested health worker and consumer satisfaction.

¹ Management of the child with a serious infection or severe malnutrition, guidelines for care at the first referral level in developing countries. WHO/FCH/CAH/00.1

Table 13 Selected quality of care indicators from Health Facility Surveys

| | Peru | | Egypt | Zambia |
|---|--------------------|-----------------|---|-----------------|
| | Control facilities | IMCI facilities | IMCI facilities (IMCI trained providers only) | IMCI facilities |
| Child checked for 3 general danger signs | 4% | 38% | 95% | 25% |
| Child checked for cough, diarrhoea and fever | 72% | 91% | 99% | 71% |
| Child's weight checked against a growth card | 39% | 63% | 100% | 30% |
| Child's vaccination status checked | 43% | 58% | 99% | 76% |
| Child under 2 years of age assessed for feeding | 22% | 37% | 86% | 20% |
| Child needing an oral antibiotic and/or antimalarial is prescribed the drug correctly | 21% | 11% | 74% | 46% |
| Child not needing antibiotic leaves facility without one | 74% | 72% | 95% | 86% |
| Caretaker advised to give extra fluids and continue feeding | 35% | 68% | 91% | 23% |
| Caretaker of a child prescribed ORS/oral drugs can describe how to give it to the child | 55% | 74% | 60% | 50% |

Source: Ministries of Health data, Peru HFS 1999, Egypt HFS 2002 and Zambia HFS 2001

Two studies were recently conducted in Kazakhstan to determine if IMCI training would reduce the inappropriately high rate of referral in the country. The first study, conducted by ZdravPlus (USAID), showed a hospitalisation rate 11% lower in the IMCI-implementing sites in comparison to control sites. A significant decrease was observed in particular for diarrhoeal diseases. The second study, conducted with the support of the MCE¹, did not demonstrate an effect of IMCI training alone on the hospitalisation rate. The study, however, did not tell whether the quality of referral had improved. No similar studies had been conducted in the other AR countries.

5.4.2 What was the contribution of IMCI in strengthening the health system?

Most health interventions, including IMCI, require a health system with reasonable capacity in terms of drug supplies, supervision, monitoring and referral care. When the IMCI strategy was conceived, it was assumed that its implementation would trigger the following: health system strengthening by including

all IMCI drugs in the national essential drugs list, improving availability and use of essential child health related drugs and commodities, strengthening national and district planning and supervisory activities, organizing work more efficiently at the health facilities, and improving monitoring.

Efforts to ensure inclusion of all IMCI drugs in the essential drug lists were generally successful in all AR countries and, as described in section 5.3.3, follow-up after training was also implemented to some extent in most AR countries.

Selected health facility survey data from Peru, Egypt and Zambia are shown in table 14. In Peru, IMCI implementing facilities were more likely to have all essential drugs available, have all equipment and supplies to provide full vaccination services and were likely to have better supervision as compared to control facilities. Despite this, participants in the country workshop concluded that IMCI was not seen to have an important and continuing role in strengthening the health system.

¹ IMCI training and hospitalization rates in Kazakhstan, preliminary results, Gaukhar Abuovo and Cesar Victora, 2002, unpublished

Table 14 Selected health systems indicators from Health Facility Surveys

| | Peru | | Egypt | Zambia |
|---|--------------------|-----------------|------------------------|-----------------|
| | Control facilities | IMCI facilities | IMCI facilities | IMCI facilities |
| Facilities with all essential drugs available | 37% | 50% | 86% | 26% |
| Facilities with equipment and supplies to provide full vaccination services, including all vaccines | 63% | 85% | 88% | 80% |
| Facilities that received at least one supervisory visit that included observation of case management during previous 6 months | 40% | 48% | 36%(previous 3 months) | 56% |

Source: Ministries of Health data, Peru HFS 1999, Egypt HFS 2002 and Zambia HFS 2001

In Egypt, the capacity of the health system had been assessed in each governorate prior to IMCI implementation and weaknesses were addressed, at first using resources from the central-level then sustained by the Governorates' budgets. Data from country informants and the workshop suggested that drug availability, rational use of drugs, organization of work at health facilities, use of referral notes and maintenance of records improved in IMCI implementing districts. The weakness of the referral system remained an important constraint.

Informants in Zambia perceived that drug supplies and supervision had improved in IMCI implementing districts. The country workshop concluded that IMCI implementation could call attention to crucial health system deficiencies but that corrective action depended on partners in the health system.

In Kazakhstan, the links between changes in the health system and IMCI had been emphasized from the very beginning. IMCI was considered as having the potential for strengthening primary health care, using drugs and limited resources more rationally, and reducing unnecessary referral. If the two studies mentioned in the previous section questioned the possible effect of IMCI training on unnecessary referral, the workshop participants felt that it was too early to judge the effect of IMCI on the other elements of the health system.

There was no data to suggest that implementation of the IMCI strategy resulted in any improvements in health systems in Indonesia and Mali. The workshop participants concluded that IMCI did not have a specific role in strengthening the health system in Indonesia and that IMCI implementation had not been able to overcome the weakness in the health system in Mali.

5.4.3 What was the contribution of IMCI to strengthening family and community practices?

The third and most recently implemented component of the IMCI strategy aims at improving family and community practices related to child health. There is a growing interest in community approaches and extensive resources were being made available to support them in some countries.

The AR found widespread agreement on the importance of community action for child health, and gathered information on a number of useful, but almost always small-scale, activities and projects. Although there were some C-IMCI activities and community elements of other child health related programmes such as immunization, nutrition, or malaria, there were no overarching child health policies or strategies for community and family health in any of the AR countries, which could have assisted the coordination of activities and the monitoring of outcomes. In some cases interventions seemed to be very expensive (e.g., Approche Village in Mali). Reports from countries other than the AR countries where the community component was more advanced suggested that in some, community programming for child health was included in national program strategies (e.g. Nepal, Pakistan, Honduras, Nicaragua), and in others networks of NGOs were developing and coordination was improving (e.g., Bolivia, Madagascar, and Nicaragua).

DHS data on the current situation and trends for selected key family practices and behaviours in the six AR countries are shown in Table 15.

Table 15 Selected family and community practices and trends over last 5 years

| | Peru | Egypt | Indonesia | Kazakhstan | Zambia | Mali |
|---|----------------|----------------|----------------|----------------|----------------|----------------|
| Infants exclusively breastfed up to 6 months | 67% increasing | 57% unchanged | 43% unchanged | 34% increasing | 40% increasing | 25% increasing |
| Sought medical care for diarrhoea from any provider | 39% increasing | 46% decreasing | 58% increasing | 26% unchanged | 43% unchanged | 17% increasing |
| Sought medical care for ARI from any provider | 58% increasing | 66% increasing | 69% increasing | 48% unchanged | 69% decreasing | 43% increasing |
| ORS used during an episode of diarrhoea | 22% decreasing | 34% decreasing | 48% increasing | 32% increasing | 53% unchanged | 12% decreasing |
| Increased fluids given during an episode of diarrhoea | 55% decreasing | 17% decreasing | 57% increasing | 58% increasing | 51% decreasing | 54% increasing |

Source: Egypt DHS 2000 (& 1995), Indonesia DHS 1997 (&1992), Kazakhstan DHS 1999 (& 1995), Mali EDSIII 2001 (& 1995), Peru ENDES 2000 (& 1996), and Zambia DHS 2001 (& 1996)

The situation with regard to exclusive breastfeeding and care-seeking for common childhood illnesses improved or remained unchanged since the last DHS in most countries. However, the indicators for treatment received by children with diarrhoea at home worsened significantly in Peru and Egypt, and to some extent in Zambia and Mali (in contrast, use of ORS and increased fluids during diarrhoea had improved over the 1990-5 period in Egypt, Peru and Zambia). Concerns were raised in the country workshops that the observed decline could be a result of the discontinuation of community activities of the CDD programme following the introduction of the IMCI strategy. The end of the free distribution of ORS in some settings may also have affected ORS use rates.

All countries had difficulties in defining what “community IMCI” was and the point was raised that health ministries might not always be the best leaders for community action.

The key family practices¹ promoted by IMCI as “best practices” for child health in households and communities were well accepted in all AR countries. Local authorities and NGOs stressed the importance of prioritisation among the key family practices in any particular community setting. It was felt that actions and messages must be few, simple and relevant to achieve change.

The framework for community IMCI proposed by the CORE Group was often referred to and found useful to systematize thinking around possible interventions². Other frameworks for community interventions were developed recently (e.g., by WHO/EMRO and WHO/WPRO) but the EMRO framework was not specifically referred to in Egypt at the time of the AR visit and no country of the WPRO region was visited.

Some countries were very interested in the potential that IMCI has for improving the quality of care in the local health post and for linking the health facility to care and prevention in the community, building on existing structures. In Zambia, facility-based IMCI was seen as a good entry point because it improved care and counselling skills, increased access, and promoted outreach activities. The government in Indonesia planned to extend the use of its existing community midwives to deliver community-based treatments for sick children. In Kazakhstan, there were plans of making wider use of the existing system of periodic home visits by health facility staff. Mali and Peru had a tradition of work with communities and had planned to deploy more community-based health agents.

¹ Improving Family and Community Practices, a Component of the IMCI Strategy, WHO and UNICEF, WHO/CAH/98.2

² Winch P., Leban K., Kusha B., Reaching Communities for Child Health and Nutrition: A Framework for Household and Community IMCI, Child Survival Collaboration and Resources (CORE) Group and BASICSII, 2001

5.4.4 Plans for scaling up interventions, including IMCI

All AR countries had the intention of expanding the coverage of their child health activities. However, clear and comprehensive plans for scaling up interventions linking expected child health outcomes with human resources' needs and budget were not available:

- Egypt had plans and targets to expand IMCI training and strengthen health facilities to cover 40% of districts by the end of 2003, and 67% by the end of 2005. The government expected these plans to be supported with external funds.
- The central government in Indonesia would keep working on developing or adapting IMCI tools and making them available for use by districts. Although it also had plans to encourage more districts to use IMCI training, it faced the challenge of having to advocate for IMCI in each district and of not having a sufficient budget to scale up IMCI implementation. It was for each district to decide on IMCI implementation and plan accordingly.
- Kazakhstan had focused on ensuring a good quality of life, including a healthy start, within an integrated health system. The senior Ministry of Health and UNICEF country office consider demonstration of local cost-effectiveness studies as a pre-requisite to further investment.
- Mali was still at a very early stage of IMCI implementation and had no plans for expansion at the time of the AR visit. The government was exploring ways of financing the five-year Programme de Développement Sanitaire et Social (PRODESS), including its child health component. Since the AR visit, and using the AR country workshop conclusions, Mali developed a strategic plan and UNICEF included Mali in the priority countries for the implementation of the "IMCI-plus" (planning method developed and tested by UNICEF and the WB, often referred to as "marginal budgeting for

bottlenecks"¹, to link scaling-up plans of priority child health interventions to expected outcomes and needed resources, and to develop national Mid Term Expenditures Frameworks).

- IMCI implementation had been enhanced in Peru by the Regional Goal of preventing more than 100,000 deaths in children by the end of 2002, using the IMCI strategy in areas with high mortality (Meta 2002). At the time of the AR, the central government did not have national scaling up plans specific for IMCI. Districts had the responsibility of choosing their priority interventions and delivery strategies, including IMCI, as long as the selected interventions were consistent with the national integrated model for health that was under development.
- In Zambia, the scaling up of child health interventions might be driven by strong and well funded initiatives such as RBM, which had plans to use IMCI training, or the Prevention of Mother-to-Child Transmission of HIV infection (PMTCT) project that also planned to use IMCI training as an entry point. The government was also working to convince more donors to collaborate with the SWAP to help strengthen health system and scale up interventions.

5.5 What were the perceptions of key informants in countries regarding the major child health issues and IMCI?

Several informants suggested that there was an "epidemic" of new initiatives coming from the global level without possibilities to adequately follow up and implement them fully. This generates distrust in countries regarding these multiple initiatives.

Resources – human and financial – committed to the implementation of child health programmes and IMCI were limited and this was felt as one reason for relatively low coverage. Another reported constraint was the high health worker turnover in all countries and the persistent loss of trained personnel due to

¹ Soucat A., Van Lerberghe W., Diop F., Nguyen S.N., and Knippenberg R. Marginal budgeting for bottlenecks: a new costing and resource allocation practice to buy health results. Policy and Sector Analysis Support Team-Africa Region Human Development, The World Bank, draft 2002

HIV/AIDS in Zambia. This continued erosion of trained manpower was perceived to be undermining the achievements made in improving the quality of care delivered through health facilities.

Usually, IMCI was perceived as a good standard for case management of the sick child, and it was recognized that IMCI training had led to improvements in the quality of care. However, it was often perceived to be just a training programme. Several informants among Ministries of Health found IMCI training to be too long and several informants among implementing partners added that the training was too expensive compared to the resources available in relatively poor countries.

Several key informants reported that the IMCI strategy was not enough to cover the entire range of child health needs. Other areas like peri-natal and newborn care, infant and young child feeding, care for development and immunization were required in addition to the IMCI strategy for child health and development.

It was felt that IMCI had to go to scale quickly in the countries if it wanted to survive. There were suggestions to explore alternative, less expensive, approaches for training. Several informants expressed the need for a clear definition of community IMCI and concrete activities and tools for its implementation.

5.6 What were the perceptions of implementing partners at the global level in relation to the major child health issues?

Relevant opinions expressed by key informants from the global level related to the current child health challenges and possible role for IMCI have been summarized below. In some cases several informants have been interviewed within the same institution and may have expressed similar or contradictory opinions.

5.6.1 What were the perceptions about the current child health situation and environment in which child health activities are implemented

Many informants acknowledged that the overall decrease in under-five mortality during the last decade gave the international agencies the impression that child survival required less priority and that atten-

tion had to shift towards new emerging diseases or more sophisticated interventions. There was a general perception that child survival did not receive the attention it deserved during recent years and that more investments in priority child health interventions were urgently needed to rapidly improve child health outcomes.

Several informants recognized implicitly that the loss of priority for child survival on the agenda of many agencies could reflect a limited ability of advocates within key donor organizations to argue for greater resources for child health within their own organizations. There was a sense of lack of leadership in child health.

The view was widely held among global partners that interventions had to be planned according to country needs and health system capacity. The international community should work more on meeting defined government priorities rather than implementing fixed interventions and/or tools. Different child health intervention delivery mechanisms should be considered, and possibly implemented in parallel, taking into account the local health system capacity, the need to strengthen it, and the need to achieve rapid improvements in child health outcomes.

Several partners added that it should be up to the government to determine the priorities and express these priorities in policies and plans. It should be up to the international agencies and implementing partners to ensure that key child health problems do not disappear from government priorities and that performance indicators under World Bank programmes and Swaps include relevant child health and nutrition process or outcome indicators and that these outcomes become part of the policy dialogue. Some informants felt that global initiatives such as the Global Fund can distract attention from child survival and are “distortionary” at country level.

There was a consensus on the need to strengthen health systems to ensure sustainability of interventions and suggestions for a broad definition of health systems including the private sector, NGOs, and the communities.

It was also recognized that although the role of the public health sector, including stewardship and monitoring, was critical for the scaling up of interventions, this role was often neglected and under-funded.

Informants often drew attention to the urgent need to address inequities in health. There was a perception that better planning and management could help reach the poor and excluded population without huge extra costs. But this may require different skills in the health systems and partner organizations.

Several informants stressed that many institutions were moving away from “project” assistance targeted to specific health interventions towards sector wide approaches. They highlighted the need to better link scaling-up plans with expected child health outcomes and needed resources and to include these in Medium Term Expenditure Frameworks under PRSPs.

Many partners emphasised that few children are actually receiving health services, even at first-level health facilities, and therefore, quality care should be brought closer to the community. Many partners want to prioritize community action for child health, but recognize that too often it had led to multiple pilot projects without scaling up. The cost and complexity of community-level work are also often underestimated.

5.6.2 What were the perceptions about IMCI?

The AR noted that within the same institution there could be very different point of views regarding IMCI, and that some implementing partners seemed to have shifted from an initial enthusiasm towards a “more sceptical” approach to IMCI. Such partners expressed some doubts about the effectiveness of IMCI and the feasibility of scaling it up. This could reflect an inadequate information flow on IMCI and a lack of continued advocacy.

The major perceptions of key informants at global level regarding IMCI have been organized in three sections: general observations, the acknowledged strengths, and the perceived weaknesses of the IMCI strategy.

General observations

On one side, many informants advocated for the inclusion of additional conditions in IMCI such as the neonatal conditions, street children problems or issues of growth and development and of psychosocial development. On the other side, some informants considered that to succeed IMCI should remain focused on fewer conditions and allow linkages to other

areas, but that these new areas do not need to be included in the IMCI strategy.

IMCI was perceived to require stronger programmatic management and a functioning health system. In some countries these elements are not yet present, and this is often the case in countries with greatest child health needs. Several informants suggested that to quickly improve child health outcomes in those countries, the international community should be able to propose alternative, simpler, and more focused programmes. A few informants also felt that it might be better to implement IMCI in a targeted fashion rather than trying to cover an entire country.

It was felt that although there were implementation problems, it would be extremely disruptive and unfair to some countries to recommend moving away from the IMCI strategy.

The difficulties and challenges of scaling up child health programmes, especially at community level, were acknowledged. It was recognized that community interventions were not cheap and that it was difficult to sell “integration” at community level. Governments needed incentives to do this and donors did not effectively stimulate MoHs to participate in community-based programming.

Perceived strengths

IMCI contributed to the introduction of a more holistic approach to child health in countries and provided opportunities to bring people together around the same table. It forces government and implementation partners to “think” in a more evidence-based and integrated manner.

IMCI highlighted the importance of anemia and malnutrition in children and provided the opportunity to insert elements of nutrition and anemia into integrated child health packages.

Like the country informants and workshop participants, global key informants perceived that IMCI offers technically sound standard protocols, often lacking in countries. They also perceived that in addition to being useful in countries with high child mortality, IMCI could help countries with lower mortality rationalize and improve child health care.

The conceptual frameworks developed for community IMCI were perceived as useful to operationalize community interventions.

Perceived weaknesses

It was felt that IMCI was not organized and implemented as a “programme”, with an investment platform that could be used globally to attract funding. It was also perceived that IMCI implementation had been mainly donor driven with inadequate financial commitments from national governments.

There was some confusion about what IMCI was and what could be expected from it. It was suggested that IMCI should probably be part of a broader child health strategy in a country, but should not become the child health strategy itself.

It was perceived that IMCI had often been limited to health facilities in the public sector, which may not reach children most at risk of dying.

The current training approach was felt to be heavy, time consuming, and not allowing fast rollout. Some informants suggested that there might be a need to simplify and accept some reduction in quality and completeness in order to achieve necessary coverage.

Community IMCI was felt very vague and as not knowing yet where it was going. It was suggested that community approaches should emphasize more utilization of what exists rather than promoting new interventions.

6.1 Context in which IMCI was implemented

The AR confirmed the inequities in child health related to economic, socio-cultural, geographic and ethnic differences. Costs of care were a major determinant of poor utilization of health services. Out of pocket expenses for health accounted for about a week's worth of income for a typical person in most of the AR countries. Other determinants of the low utilization of health services were poor access, behavioural and cultural barriers and the perception that the quality of services was poor. These inequities and low health service utilization could be a major obstacle to achieving maximal impact on child mortality.

Of the six AR countries, only Indonesia was developing a comprehensive child health policy. The perception of the importance of such a policy in improving implementation of child health interventions was variable in the countries visited, but the AR team felt that such a policy could have an important role in helping governments raise funds and coordinate donor inputs to improve child health outcomes.

Health systems were at different stages of decentralization in the AR countries, and this had an effect on child health interventions. The AR team saw IMCI, and other child health programmes, being implemented in Egypt similar to centrally managed programmes with substantial donor budgets. On the other end of the spectrum was Zambia, where the system had become so decentralized that the central level had lost its stewardship role and it was up to each district to decide which health interventions to implement. Decentralization created both opportunities and challenges for IMCI implementation. It moved decisions and resources closer to users but reduced technical capacity for implementation. It highlighted the need for strengthening capacity for planning and implementation of child health programmes

at the district level and for developing new skills at central level to better position child health in sector wide approaches and health sector reforms.

6.2 Ownership of IMCI by the governments

In all six AR countries, IMCI was acknowledged as a strategy useful to implement national health plans or compatible with existing health policy documents. This ownership was, however, not matched by financial commitment from governments to IMCI implementation. The major sources of funds for implementation had been and continued to be external donors, making implementation vulnerable to change in donor policies. This also resulted in IMCI being viewed by several key informants and country workshop participants as something coming from outside.

6.3 Case management guidelines and the adaptation process

The functioning of the different IMCI working groups, created to plan and coordinate IMCI introduction in countries, withered when implementation started and this was considered to have affected implementation. It is notable that although national and local IMCI working groups were recommended to plan and coordinate implementation¹, efforts to establish and sustain them were weak compared to those for the adaptation groups.

Three of the six countries reduced the duration of training because they perceived that the recommended duration of 11 days was too long.

The adaptation process was relatively short in Zambia and conducted by an implementing partner. In Peru, the adaptation process was also short but involved multiple participants from the ministries and

¹ IMCI Planning Guide: Gaining experience with the IMCI strategy in a country. WHO/CHS/CAH/99.1, 1999

teaching institutions as well as health professionals from neighbouring countries. In Mali, the adaptation lasted about two years. Different levels of government ownership, national technical capacity, and resources committed by governments and implementing partners could explain the important variations in the duration of the adaptation process.

6.4 Improving health worker skills

The coverage of training was generally low, with less than 10% of all health workers dealing with care of children in the public health sector in the countries trained at the time of the AR. Important reasons for low coverage included the inadequate human and financial resources invested in training activities and the relatively short implementation period in some of the AR countries. Only limited information was available on similar training activities over a short time period (e.g., training in CDD case management seemed to have expanded three times faster than IMCI had, since its implementation began in Peru) making comparisons difficult.

The different pace of introduction of IMCI in the six countries, with different levels of overall development and health system capacity, merits consideration. Unfortunately, IMCI seems to perform less adequately in settings with weak health systems, which are those where under-five mortality is usually higher. Other child health programmes suffer similar difficulties in these countries. For example, EPI reported a worsening of immunization coverage in Mali and Zambia over the past five years. Deliveries attended by skilled personnel followed similar trends.

An encouraging observation is that once IMCI has been introduced in a country and national training capacity has been built, the expansion of training could go much faster. For example, all districts have been involved in training activities in Peru in 6 years, Indonesia involved one of every two districts after 5 years, Zambia one of every two districts in 6 years, and Egypt one of every four districts in 3 years.

The enthusiasm of academic institutions for pre-service training can be explained by the recognition of the sound scientific basis of the case management guidelines, the appreciation of the communication and counselling skills, and in several countries the involvement of these academic institutions during the

adaptation process. Pre-service training was seen as a potentially sustainable way of improving health worker skills in both the private and public sector.

6.5 Strengthening the health system

Of all AR countries, specific interventions for strengthening health systems, beyond follow up visits after training and the update of the essential drug lists, were only visible in Egypt. Tools to strengthen this component were fewer at the time of the AR and were developed later than the case management guidelines and training materials.

In most countries, the coverage of follow up after training was good during the early implementation but dropped during the expansion phase. The possible reasons identified in the AR were: low priority given to follow up, the non inclusion of follow-up visit costs in the training budgets, and the overall lack of resources made available for supervisory activities by implementing partners.

6.6 Improving community and family practices

The community component of the IMCI strategy was the last to be developed and implemented globally. The definition of what community-IMCI could mean was unclear in all countries. Some countries were training community health workers to deliver community-based health care, and there was no problem with identifying this as a community-IMCI activity.

Although some countries had defined the community interventions and selected the key family practices they intended to promote, the delivery mechanisms for these interventions and the role of the health system in the coordination of these activities remained a challenge.

One significant concern that was highlighted was the worsening of the indicators for home case management of diarrhoea. Three AR countries reported decreased ORS use rates and similar findings were reported for increased fluids intake. These findings were based on general trends in the countries and not on data specific to areas where IMCI was being implemented. The decline in these two indicators started

prior to IMCI introduction in the AR countries but does not seem to have been prevented by IMCI. Possible reasons for this finding could include that community activities of previous CDD programmes were stopped without adequate replacement with community-IMCI activities, or that ORS became less available or affordable due to the interruption of free distribution. Another concern was the lack of visible progress in increasing appropriate antibiotic treatment for children suspected of pneumonia.

6.7 Role of IMCI in child health

IMCI was perceived to have an important potential role in improving child health if high coverage could be achieved and sustained. However, key informants and country workshop participants perceived that IMCI was not enough to cover all child health needs. Delivery and care of healthy newborns including those delivered at home, infant and young child feeding, care for development and immunization could not be delivered only at sick-child contacts or through community messages on appropriate practices. There needed to be complementary approaches to behaviour change and social mobilization and communities needed to have increased access to quality services.

The statement that the IMCI strategy could “bring it all together” and meet child health needs as launched in Santo Domingo in 1997¹, was interpreted by some as if IMCI could coordinate the full range of child

health services. It might also have created unrealistic expectations and have encouraged some countries to use IMCI as the overall child health strategy. However, IMCI had been raising policy and strategy issues increasingly over time and had probably a catalysing role in the rethinking of child health priorities in many countries.

6.8 Limitations of the AR and cautions in interpretation

The AR findings are based on the six countries visited and cannot be generalized to the 33 countries that were implementing the IMCI strategy beyond a few pilot facilities at the time of the review. Of the 18 countries short-listed based on the AR selection criteria, only six countries were visited and a desk review of other short-listed countries was not possible because of paucity of resources. The six countries were not selected as a representative sample of all countries implementing IMCI.

Each country visit lasted six to nine days, which may not have been enough to get a holistic view in the country, particularly at district level. Field visits were not feasible. Despite conscious efforts by the A.R. teams to include district health staff, this may have led to a greater emphasis on central level perception than would be desirable, especially in decentralized countries.

¹ First Global Review and Coordination Meeting on IMCI: IMCI brings it all together. Santo Domingo, Dominican Republic, 1997. WHO/CHC/97.11

Summary of findings

The analytic review was successfully completed in a short time frame and with limited resources. It has been an example of a fruitful collaboration between DFID, UNICEF, USAID, and WHO. In addition, the process of the AR was welcomed in the participating countries and at least three of them had planned follow up activities after the visit of the AR team.

7.1 Current child health situation and context

- Global progress in reducing infant and child mortality has slowed during the past decade and inequities in health have widened within and across countries. Child survival has received less attention internationally during this period.
- With the exception of peri-natal conditions, the major causes of infant and child morbidity and mortality remain those covered in the IMCI case management guidelines, including diarrhoeal diseases, pneumonia, measles, malaria, malnutrition and anaemia. HIV/AIDS has become an important infant and child health problem in Sub-Saharan countries and is slowly gaining importance in other countries.
- Health service utilization continues to be low in most AR countries. Formal and non-formal costs of care, poor access, behavioural and cultural barriers and the perception that the quality of services was poor were major determinants.
- There were valuable efforts to prioritize the most needy sector of the population in all countries, but they were insufficient to visibly reduce inequities in health.
- Health systems and human resources for health were deficient in many countries. Staff turnover was high in all countries, and HIV/AIDS was one major reason for this in Zambia.
- The environment in which child health interventions were being implemented was changing rapidly, due to restructuring of the health sector, shifting towards sector wide approaches to health financing, decentralization of health service management, and the emergence of new international, disease-specific, funding initiatives.
- Overall, there were not enough investments in child health, and existing funding mechanisms, such as HIPC, PRSPs, SWAPs, and global funds, were generally underused for child health in countries.
- Although the shift towards decentralization in four of the six countries moved decisions and resources closer to users, it was not matched by adequate capacity for norm setting, problem solving, and aggregate monitoring at central level and by appropriate capacity for priority setting, implementation, and monitoring of child health activities at district level.
- No country was found to have a comprehensive child health policy and/or strategy, although it was felt that such a document could help countries set priorities, guide investments, and provide a legal framework for coordinating partners' inputs.
- The role of the private sector in the delivery of child health care varied across countries. Existing private sector projects were often of small scale and there were major differences between the types of health services provided by NGOs and the organized private for-profit sector.

7.2 IMCI implementation and coordination

- In the six countries, IMCI was reflected to some extent in national policy documents and, at the time of the AR, all countries except Mali planned to continue to expand IMCI training and community activities (since then, and taking into account the AR conclusions for the country, Mali has drafted expansion plans). This was, however, not matched by financial commitments and IMCI implementation continued to be essentially external donor funded.
- In the six countries and supported by global data, investments in IMCI have been small relative to the magnitude of the burden of the diseases and conditions included in IMCI and in comparison to other investments in health. As a consequence, coverage remained low, reducing the possible effect of IMCI on child health outcomes.
- None of the six countries had implemented the three components of the IMCI strategy fully and in an interdependent manner yet. Most of the IMCI tools available at the time of the AR related to improving health worker skills.
- Several elements of the IMCI strategy were highly appreciated, including: its evidence-based case management guidelines recognized as best practices, the holistic approach to the management of the sick child, the technical quality of the training materials and methods, the key family practices promoted to improve child health and development in families and communities, and the IMCI conceptual frameworks for community interventions.
- In the six countries, coordination of child health programmes, including IMCI, was weak. In its introductory and adaptation phases, IMCI succeeded in bringing together different partners and departments within MoHs. However, this was not sustained during implementation.
- In the AR countries and supported by global data, IMCI was generally introduced as a strategy, not as a programme. If this was not a barrier in the pilot phase, it seemed to generate problems for rapid scaling up. In five of the AR

countries, IMCI focal persons did not have the rank or the responsibility of previous disease-specific programme managers within their MoH, and IMCI did not have a budget line and a strong management structure.

- In the AR countries, IMCI performed less adequately in settings with weak health systems. Implementation was stronger when roles, responsibilities and accountability were clearly defined at the central and district levels.

7.3 Improving health workers' skills

- IMCI in-service training was valued for its content and hands-on methods and widely appreciated by health workers and district staff. IMCI training was, however, perceived to be resource demanding. Three countries had reduced the training duration.
- In the AR countries and supported by global data, there was evidence that the use of the IMCI case management guidelines in first-level health facilities by IMCI trained health workers improved the quality of care delivered to children, caretaker satisfaction, and health worker motivation and empowerment.
- At the time of the AR, the coverage of IMCI training was generally low, with less than 10% of all health workers trained in each of the six AR countries. This low coverage, coupled with low health service utilization, was likely to limit the possible impact of IMCI on child health outcomes.
- Pre-service training in IMCI was appreciated by teaching institutions for its innovative training methodologies and evidence-based approach to child health. It was also seen as a way to improve the attitudes and practices of health workers in relation to caretakers, families and their communities. It was seen as a complement to in-service training.

7.4 Strengthening the health system

- In the six countries, specific interventions for strengthening health systems (beyond the conduct of follow-up visits to recently trained health workers and the update of national essential drug lists), were limited. Only Egypt had made assessments of district health system capacity and had addressed major system problems prior to IMCI implementation.
- In the AR countries and supported by global data, the expectation that the IMCI strategy would trigger a broader look at health system constraints such as: the lack of human resources, health worker incentives and rotation, inadequate referral care, and low utilization of services, had not been widely fulfilled.
- Data from the global level and the six AR countries suggested that, although several tools exist, programme monitoring was generally poor, information was not linked to child health outcome targets, and that there was no systematic monitoring of child health outcomes at population (or “household”) level.

7.5 Improving family and community practices

- Based on global data and the six AR countries, the importance of a community component for IMCI was widely recognized. Donors made funds available for community interventions and many existing projects were renamed “community-IMCI”. However, most of these projects were of limited scale, were not always recognized by national health authorities, were poorly coordinated, and their costs might have hampered their scaling-up.
- With the exception of training materials for community health workers, few practical tools had been made available for IMCI community activities at the time of the AR.
- None of the six AR countries had a commonly understood definition of community IMCI. The planning process for community IMCI laid-out by the Inter-Agency Working Group on Community IMCI (assessment, mapping of existing interventions, prioritization and implementation, stock taking and expansion) had not been implemented in any of the countries.
- None of the AR countries had a coherent child health communication strategy.
- There seemed to be a consensus on the need to improve the link between first-level health facilities and the communities they serve.

When discussing the terms of reference for the analytic review of the IMCI strategy, partners had identified four major objectives. Based on the six AR countries and supported by global data, the AR partners concluded the following:

AR objective 1

Define the contributions of the IMCI strategy in responding to children's needs for improved health and development.

- IMCI is technically sound.
- IMCI is adaptable and offers an epidemiologically based integration of child health care. There is a need for complementary interventions to address the full range of child health needs in countries (e.g., social marketing of bednets, vitamin A, child health days, newborn care, maternal health).
- The IMCI case management guidelines are recognized as good evidence-based standards for child health care practice.
- The training in IMCI is effective. Its implementation improves health worker performance and the quality of care delivered to sick children attending first-level health facilities, in the public sector.
- IMCI has succeeded in adding the drugs required for child health care onto the national essential drug lists. In some cases it has contributed to improved availability of essential drugs for sick children attending public first-level health facilities. IMCI has had limited influence on broader health system issues such as: human and financial resources, health worker incentive and rotation, inadequate referral care, or low utilization of services.
- The key family practices promoted to improve household and community practices for child health are widely accepted.

AR objective 2

Provide information to refine the IMCI strategy and implementation approaches for achieving greater coverage and impact of IMCI on child health outcomes

- Quality IMCI training leads to improved health worker performance, although the time and cost of such training requires further examination of the balance between time, cost, and effectiveness. WHO and partners should draw on the experience of countries that have modified IMCI training, including evaluation of the effects of these modified approaches on health worker practices.
- There is a need for technical guidance to assess health system capacity in countries in relation to child health interventions. Such assessment should identify what “could be changed directly” at each level of the health system by child health programs themselves (e.g., management guidelines for outreach activities); what broader factors “could be influenced” by those programs (e.g., improving drug management); and what factors are out of reach for the time being but “could inform the debate” (e.g., numbers and compensation of health workers).
- So far IMCI has been introduced predominantly through public health services. Recognizing the importance of the private sector for scaling up of child health interventions, other providers and delivery channels than the public sector need to be considered.
- There are tools that have been developed to support IMCI implementation (e.g., Drug Supply Management Course, Guidelines for Follow-up Visits after IMCI Training, Health Facility Survey for Integrated Child Health Services, Management of the Child with a Serious Infection or Severe Malnutrition: Guidelines for Care at the First-Referral Level). These tools need to be applied more widely and their use evaluated.

- Additional tools or guidance needs to be provided for improving management of IMCI, for developing and managing communication approaches for child health, and for monitoring outcomes at household level.
- There is wide recognition of the importance of the communities to improve child health outcomes, however, there have been more investments in pilot projects to study the process and develop tools than in large scale implementation.
- A generic approach to community IMCI applicable to all countries may not be feasible, but, within a country, it is important to have a well defined approach to implementation of community IMCI. There was not such a coherent approach yet in the six AR countries.
- The focus of IMCI on improved counselling by health workers in first-level health facilities need to be complemented by support for communication strategies for child health.
- The three areas of health worker skills, health systems, and community programming are all important to maximize the impact of IMCI and other child health program approaches on child health outcomes. The sequencing of implementation of these three areas should be planned flexibly, in the context of feasibility, resources, and partners.

AR objective 3

Provide input to discussions on investment strategies for child health and development for countries, partners, and WHO

- Existing resources are inadequate for achieving child health and nutrition outcomes, especially given the burden of disease that malnutrition and major diseases represent in children.
- Investments in child health – including IMCI - need to be better linked to expected health outcomes, and targets for key child health outcomes need to be identified in countries.
- While additional financial resources are needed, achievement of child health outcomes could be

accelerated through greater use of the human and financial resources of NGOs, the for-profit private sector, and communities themselves.

- Countries and partners need to bring the resource requirements for child health programming into the discussions on use of broad financial sources such as HIPC, PRSPs, and global funds. Existing resources are often underutilized and capacity to use them needs to be strengthened.
- The development of national child health policies, strategies, and plans would greatly facilitate countries' coordination and promotion of child health investments and donor inputs.
- Child health is not adequately represented in health system discussions. The effects of decentralization of health services and the need to strengthen support to districts must be considered in plans for scaling up of child health interventions.
- In resource planning, resources need to be identified for community actions and knowledge and demand creation.
- Each country, with its partners, should examine systematically the most important child health interventions to be implemented. The choice of interventions and possible delivery mechanisms for these interventions should be made in the context of the epidemiology, resources and the health system capabilities of the country. In this process, linkages between different interventions (e.g. appropriate treatment of malaria through IMCI implementation and promotion of Insecticide Treated Nets, care for neonatal illness and routine newborn care after all deliveries, vitamin A supplementation with immunization or other outreach activities) should be taken into account.

AR objective 4

Understand how WHO, partners and countries can better support and coordinate the range of actions needed to meet children's needs for improved health and development – See "Recommendations".

Recommendations

Based on the AR findings and global data, the AR Steering Committee recommends:

- That, considering the strengths of the IMCI strategy and the existing commitments and investments by countries, the IMCI strategy, with relevant improvements, should be continued and expanded, as part of a broader investment approach to improve child health outcomes.
- That each country should better define the position, role, and structure of IMCI, including the community component, in its health systems.
- That countries, with the participation of implementing partners, develop national policies and strategies that set child health priorities, define roles of IMCI and other key child health interventions, highlight links between those interventions, and identify appropriate delivery mechanisms.
- That countries and implementing partners urgently increase the resources (human, financial, external and internal) devoted to child health programmes and make better use of existing financial and human resources (HIPC, PRSPs, private for-profit sector, communities) in order to achieve the under-five MDG targets in countries.
- That health authorities at country and international level, with the support of partners, analyse the impact of critical health system constraints on child health outcomes and address these constraints in plans for health system strengthening. These constraints should also be addressed in the situation analyses undertaken by the Ottawa Child Survival Partnership and brought to the High Level Forum and other international fora.
- That WHO and implementing partners increase IMCI effectiveness by providing additional elements and tools such as tools for and training in child health programme management, an IEC guide, and approaches to monitor child health outcomes at household level using existing tools (e.g., oversampling of IMCI areas when conducting DHS or MICS surveys) and/or an IMCI-related household survey instrument.
- That additional approaches and strategies including communication, social marketing, and other approaches be implemented to complement traditional public health sector approaches, in order to accelerate achievement of improved child health and nutrition outcomes.
- That adaptations and innovations to IMCI training be encouraged and evaluated in order to increase coverage while maintaining quality.
- As evidence becomes available for additional interventions in key areas of child health (such as neonatal health, HIV, etc.), that countries, with support of WHO and implementing partners, evaluate the potential role of IMCI and other approaches, in delivering these additional interventions.
- That countries and implementing partners provide adequate resources and mechanisms to monitor progress on key child health outcomes and use this information for managing child health programmes and resources.

Follow Up Actions

During its meeting held at DFID Offices in London on 1st and 2nd October 2003, the AR Steering Committee reviewed briefly the recent international initiatives for child survival, acknowledged that there was a new momentum for child survival initiatives, and that it was important to coordinate efforts.

The AR Steering Committee noted that there was no interagency IMCI coordination group that could take stock and identify how the strategy could evolve. The

AR Steering Committee decided to reconvene next year, immediately before the follow up meeting of the “Ottawa Child Survival Partnership,” to assess progress made in the implementation of AR recommendations, look at additional information related to IMCI expected from other evaluations such as the MCE, and consider the appropriateness of creating an interagency IMCI coordination group. The conclusions of this AR Steering Committee follow up meeting would then be reported to the “Ottawa Child Survival Partnership”.

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Generic Agenda for three-day workshop in AR countries

Annex 2

| Day | TOPIC | Format | Responsible (typically) |
|-------|--|---|---|
| Day 1 | <p>Registration Opening Introduction</p> <p>1. The health situation of children - Major causes of illness and death in children - Determinants of child health and health care - Public and non-public child health care services</p> <p>2. Responding to the health needs of children - Selection in plenary of the 6 major child health issues - Group discussion on existing services and care to meet children's health needs in the country - Presentation and discussion of group findings</p> | <p>Presentation</p> <p>Presentation/discussion Presentation/discussion Presentation/discussion</p> <p>Plenary discussion</p> <p>Group discussion</p> <p>Plenary</p> | <p>AR Team</p> <p>Director of child health Director of curative care Health planning</p> |
| Day 2 | <p>Review of day 1</p> <p>3. Review of IMCI in the context of child health needs and existing interventions - Planning and introduction of IMCI, including plans for expansion - IMCI activities to develop health worker skills - IMCI activities to strengthen the health system - IMCI activities to strengthen family and community practices for child health - Group discussions on strengths, weaknesses and priorities for the implementation of IMCI in the country.</p> | <p>Presentation/discussion</p> <p>Presentation/discussion</p> <p>Presentation/discussion Presentation/discussion Presentation/discussion</p> <p>Group discussions</p> | <p>Chairman Day 1</p> <p>IMCI Focal Point</p> <p>IMCI Working Group IMCI Working Group IMCI Working Group</p> <p>NGOs</p> |
| Day 3 | <p>Review of day 2</p> <p>Financial resources available for child health and IMCI</p> <p>Policies affecting child health and health care, including poverty reduction</p> <p>4. Coordination of child health activities, including IMCI Organisation and coordination of child health activities, including IMCI - at national level - at district level Coordination of public and non-public sectors in health Improving coordination of child health and IMCI Conclusions and recommendations of the workshop Closing Informal discussions with regional and district level staff responsible for child health</p> | <p>Presentation/discussion</p> <p>Presentation/discussion</p> <p>Presentation/discussion</p> <p>Presentation/discussion</p> <p>Presentation/discussion Plenary discussion Presentation/discussion</p> | <p>Chairman Day 2</p> <p>Director of Child Health / Director of health finances</p> <p>Director of Planning</p> <p>Director of Family and child health</p> <p>Planning directorate / RBM</p> <p>AR Team</p> |

The above agenda evolved through the series of countries.

Information for preparation of country visits

1. The Analytic Review of IMCI

1.1 Background

Since 1996, when the IMCI strategy was first introduced at country level, much experience has been gained with its application. Although initially conceived as a set of evidence-based clinical guidelines to address the major causes of mortality and morbidity, IMCI has evolved into a three-component strategy with multiple interventions for different levels of the health system and communities. More and more countries are showing interest in IMCI related activities, and more than 30 countries have decided to expand beyond a few districts to scale up the strategy nationally.

There is a momentum for addressing the remaining challenges in child health and implementing strategies to scale up their impact on child health outcomes. There is a need to better define the place of IMCI within child health interventions and draw lessons from country experience to streamline the strategy. A substantial body of data is now available; information gathered from district, country, and regional levels through meeting presentations, reports, operational research, facility-based evaluations, programme reviews and evaluations by regions and partners, and preliminary results of a multi-country evaluation of IMCI costs, effectiveness, and impact.

WHO and partners, in collaboration with countries, have jointly initiated an analytic review of the IMCI strategy as a whole, while a team of expert paediatricians is updating the clinical guidelines to the latest standards in paediatric care. A broad consultative process has been established for the analytic review to ensure that the full range of experience and evidence related to IMCI is taken into account and to build consensus around any revision of the strategy, as a basis for future partnerships in research, development, and implementation.

1.2 Goals

The analytic review of the IMCI strategy will be a child-centred, forward-looking analysis conducted jointly by WHO and partners in collaboration with national authorities involved in child health programming. It will:

- Define the possible contributions of IMCI in responding to children's needs for improved health and development
- Provide information to refine strategies for achieving greater impact of IMCI on child health outcomes ("scaling up strategies")
- Provide input to discussions on investment strategies for child health and development for countries, partners and WHO.
- Provide an understanding of how WHO, partners and countries can better support and coordinate the range of actions needed to meet children's needs for improved health and development.

1.3 Specific Objectives

The analytic review will:

- Identify ways to increase IMCI's contribution to addressing remaining challenges in child health. This may include modifications to the technical scope, implementation strategy or funding of IMCI.
- Define the place of IMCI in child health and the linkages between IMCI and child health-related programmes in selected countries.

1.4 Scope

The analytic review will look at the basic assumptions underlying IMCI in relation to:

- policy issues, management, and organisation;
- the “definition” of IMCI;
- the three components of the strategy and their content;
- the place of IMCI in addressing remaining child health and development challenges;
- the linkages between IMCI and other child health related programmes;
- the implementation process and adequacy of available tools; and
- partnership and financial resources made available for IMCI in countries and at international level.

The focus of this review is the IMCI strategy in the context and reality of child health in countries, taking into account international initiatives such as the Millennium Development Goals (MDGs) and Poverty Reduction Strategies (PRSP). The review will consider IMCI implementation from inputs to outcomes and will summarize strengths, weaknesses, and lessons learned. It is beyond the analytic review scope to conduct a comparative evaluation of all possible child health interventions, but an important part of the review will be to examine the operational relationship of IMCI to other child health interventions in countries.

1.5 Process

To answer the analytic review questions a mix of desk review activities, country/region visits, and key informant interviews will be conducted jointly by WHO and partners, in close collaboration with national authorities. A desk review at global level will provide a basis and background for country visits and key informant interviews following a standard information agenda.

The review will be an iterative process, each activity being informed by the findings of those that have been completed. This approach will allow for possible adaptations in the methodology and/or information framework throughout the process, and will allow for regular feedback.

A full description of the analytic review process and information framework is available from CAH¹. The purpose of this document is to provide more information on preparations prior to visits to countries by the analytic review team.

2. Country visits

2.1 Scope and activities

The country visits are an essential part of the review process and will provide an unique opportunity to learn from the wide range of experiences of implementation of IMCI in different countries. These visits are not an

¹ “Analytic Review of the IMCI Strategy, proposed process and information framework”, version 28 June 2002.

evaluation or inspection of a country's work with IMCI but provide an opportunity for countries to take a close look at how their child health services are performing and at the role that IMCI is or could be playing

Activities planned during the country visits are designed to:

- obtain the information necessary to meet the analytic review objectives, and
- provide an opportunity for participating countries to rethink the place of IMCI within their major child health priorities and re-examine how the impact of existing interventions on child health outcomes could be increased.

During the visit the following activities are expected to take place:

| | |
|----------|---|
| Day 1 | Team organisation and briefing Review of preparations Start additional desk review of documents provided by the country (continues throughout visit) |
| Day 2 | Formal introductions Final preparations Interviews from key informants from the Ministry of Health and other relevant national authorities, partner organizations, and WHO office in countries (may continue throughout visit) |
| Days 3-5 | Workshop to review IMCI plans, operations and resources in relation to the range of interventions to meet child health needs in each country. The workshops will involve the health authorities and their formal and informal partners in the public and private sectors, nationally and internationally. |
| Day 6 | Summary of information and preparations of preliminary conclusions, Final debriefing of MOH and partners |

A draft agenda for the three-day workshop is proposed in Annex 2.

2.2 The Review Team

The analytic review team visiting the countries will consist of at least one senior staff recruited by partners and at least one WHO/CAH/HQ staff. The team will be supplemented at different stages by staff from WHO Regional Offices, UNICEF, and staff from partners' organizations present in countries. Finally, the team will include at least one national staff involved in child health, for example the IMCI focal point.

Senior staff from DFID, USAID, the World Bank and other partners may join the team in selected countries.

2.3 Preparations

2.3.1 Review of existing basic information

WHO and partners with input from countries will prepare basic information related to child health in the country through a desk review of available information at global and regional levels, including results from DHS, MICS, mortality monitoring, MCE, and other evaluations related to IMCI and priority child health interventions. Findings will be presented and discussed with country staff during the three-day workshop.

Prior to the visit, the national authorities will also be asked to assemble a set of basic documents and existing data for use in the review. Help may be provided by the WHO Country Office, including the IMCI medical officer/APO/NAPO where there is one, UNICEF country office, and staff from partners' organization working in the country. Examples of documents and information that would be useful for the analytic review include:

- National data relating to priority health needs, including mortality and morbidity by major causes, of children in different geographical areas and socio-economic conditions;
- National health policy, child health policy and/or strategy, including government policies for resource allocation for child health;
- Policies and current plans and resource data for child health-related programmes;
- Recent reports of reviews of child health-related programme activities;
- Process and outcome data on child health interventions/programmes;
- Poverty Reduction Strategic Plan, Strategies for achieving Millennium Development Goals in the country, or other plans to address inequities;
- Information/reviews/reports concerning access and barriers to and utilisation of health services – by economic stratum and educational level;
- Access to health-related commodities (at least essential drugs and vaccines and bed nets);
- Recent studies or other information on care seeking practices;
- Information (including IMCI community situation analyses) on home care knowledge and practices (including breastfeeding and complementary feeding) and the 16 “key family practices”;
- National IMCI strategy and plans, including budgets;
- IMCI pre-expansion review report and expansion plans;
- Reports of partner coordination group;
- Project documents relating to donor-supported IMCI activities – plans and reports;
- Reports of community assessments, including assessments of resources;
- Copies of guidelines and tools, including educational materials;
- Monitoring reports on IMCI implementation, including community activities;
- Reports of health facility surveys, household surveys, and other evaluations/assessments of IMCI;
- District IMCI follow-up reports; and
- Multi-Country Evaluation reports where applicable.

2.3.2 Preparations for key informant interviews

The national authorities, WHO, and partners present in the country will be asked to propose names of possible key informants and to arrange for individual or very small group meetings for the Review Team with key informants.

The list of informants may include:

- Senior staff of the national Child Health Division
- Senior staff of specific programmes relevant to IMCI and child health (e.g. MCH, malaria, EPI, Nutrition, Essential Drugs)
- NGOs actively concerned with IMCI and child health (through the health NGO coordinating committee, if there is one)
- Technical partners or institutions (e.g., national paediatric association)
- Representatives of private sector – involved in both the provision of health care and the provision of health commodities
- UNICEF
- WHO
- Country representatives of partners investing in child health in the country (including DFID, USAID and World Bank)

If possible, the list of possible key informants should be ready prior to the visit of the analytic review team. Preparations for the interviews should include ensuring that any relevant prospectuses, programme annual reports, training and educational material and financial reviews are available and that an appointment could be scheduled during the country visit.

2.3.3 Preparations for the workshop

The workshop will last three days and is expected to start on the third day of the review team's visit to the country. Suggestions about the type and quantities of materials that might be needed during the workshop include:

- meeting room to accommodate 20 people
- access to a computer
- access to a photocopier
- two or three flipcharts, flipchart stands and paper
- markers (if possible as many blacks as participants)
- if possible, for VIPP use (Visualisation in Participatory Programmes) we need pin boards, glue, masking tape, large rolls of wrapping brown/white paper
- eventually name tags
- a pen and a notebook for each participants
- infocus machine or similar (for slide projection from a computer) and overhead projector
- white and coloured paper for VIPP cards

Possible participants in the workshops include:

- National and district representatives from different departments of the Ministry of Health associated with IMCI and other interventions targeting priority child health issues
- Senior staff from programmes and institutions associated with IMCI (malaria, essential drugs, EPI, primary care, nutrition etc)
- Representatives of health and development management and technical teams from district and community levels
- Non-public sector health care and commodity providers, including NGOs
- Local representatives of partners in child health (UNICEF, donor agencies, bilateral cooperation, etc).
- Representatives from other sectors than health if necessary (e.g., selected community interventions may be located in non-health sectors)

The invitation to the participants in the workshop should include a copy of the tentative agenda and the document describing the process and overall framework for the analytic review. Participants should be informed that the analytic review will look critically at assumptions made when conceptualizing the IMCI strategy in their country, at the possible benefits of the strategy since its introduction, the management/organization/policy issues they are facing, the components and content of the strategy, the possible linkages with other child health related programs and strategies, the implementation process, and the tools available to support implementation.

Invitees should be encouraged to bring to the workshop the latest operational plan for IMCI implementation in their district/region/country, their strategy for scaling-up if existing, an organogram showing where IMCI fits in the Ministry of Health (if available), success stories or examples of barriers related to quality of care or to the health system or to community interventions. They should feel free to bring any other documents or materials they think could be relevant to the workshop.

Some of the participants will have to prepare short presentations as shown in the tentative generic agenda available in Annex 2. The time allocated for the country visit is limited and it will be critical to focus presentations on key achievements or issues only and to respect the timing. The objective is to get a picture as accurate as possible of the current place of IMCI in child health and not to write the history of child health or IMCI in the country.

3. Key informant interviews

These interviews will normally last 60 to 90 minutes and will be guided by a short list of relevant questions. A preliminary list of generally applicable questions is given below.

- What activities does the programme/organization carry out in relation to children under 5?
- What are its aims and objectives and target population?
- What are the achievements of the programme in relation to its objectives?
- What are its major constraints?
- What activities of the programme relate to IMCI plans/activities - in the areas of training, delivery of care for common illnesses, preventive actions, counselling, health service strengthening, supervision, community health activities?
- How are these activities coordinated with related IMCI activities?
- What do they think about IMCI? - objectives, way of working, relationship to existing programmes, strengths and weaknesses
- How has the programme been directly involved with IMCI – in the development phase; in early implementation phase; now?
- What does IMCI do or offer that could support the achievement of the objectives of the programme?
- Has IMCI presented any problems to the implementation of the programme?
- What extra can IMCI offer to child health services? What is the “added value” of IMCI?
- What are the expectations of IMCI in relation to country priorities? Are they being fulfilled?
- What needs to be done to make IMCI more effective – locally or nationally?

In addition for funding partners

- What are the priorities of the agency in the area of child health?
- How does the agency support child health, e.g. direct funding for programmes, pooled funding (SWAPs)? What are the advantages and constraints of the system in place?
- How does IMCI fit within the programme of support for child health?
- What are the expectations of IMCI in relation to your priorities? Are they being fulfilled?
- What are your present plans for support to child health and IMCI?

4. Country workshop

The workshop will last three days and is expected to start on the third day of the review team’s visit to the country. The main sessions of the agenda will be:

- a. **Description and analysis of the child health situation in the country, including the main determinants**

The presentations and discussions will help participants have a common understanding of the child health situation and health infrastructure (public, NGO’s, and private sectors) in the country. The discussions should lead to the identification and agreement on the six most important causes of child mortality and morbidity. Possible significant variations among different geographic and economic groups in the country should also be highlighted. This session will provide the basis for the subsequent discussions throughout the workshop.

Sections 1.1 and 1.2 of the information framework may be used as a guide. The information may be presented by senior staff from the child health division, primary health care or curative and preventive services. Staff from the HMIS may also contribute. Members from the analytic review team will present the findings of desk review relevant to the country.

This session will require 3.5 hours.

b. Responding to the health needs of children

Based on the six priority challenges in child health identified in the previous session, this session will begin by defining the interventions needed at each level of the health system to address the priority challenges, taking the child as starting point.

When the needed interventions have been identified, meeting participants will map existing interventions for each of the six priority child health needs, examine each to see whether it is available in reality, how it is being provided (considering both public and private sectors) and what its major facilitating factors and constraints are.

This session may be conducted as a guided group exercise in which the participants list the necessary interventions at each level for each of the priority child health issues defined in the first session. The discussions will consider the needs to address inequities, including children in economically deprived communities, and interventions delivered by the public and private sectors at national, district and community levels.

The second half of the session will be a plenary discussion about the range of interventions needed and being provided to address the most important child health issues, and about the successes, constraints and possible gaps. The session will provide a basis for defining the best use of existing child health interventions, including IMCI, and how IMCI could eventually increase its contribution in addressing the priority challenges in child health.

The staff of the programmes and organisations as well as the health service staff from districts and communities will be the main sources of information for this part of the session. Additional information may be provided by the desk review and key informant interviews.

This session will require half a day.

c. Review of IMCI in detail in the light of the existing needs and interventions

The IMCI activities will be presented by the IMCI focal point and other appropriate staff and discussed in plenary.

The session may be divided into the following sections:

- Planning and organisation of IMCI. Including present and future scope of IMCI
- Implementation:
 - Skills development
 - Supervision, referral, drugs supplies etc
 - Community activities
- Monitoring, including achievement of planned outcomes for child health
- Resources for IMCI
- Scaling up – activities and plans, including addressing needs of unreached children.

In addition to updating the participants on the activities and achievements in each component, the presentations and discussions should focus on facilitating factors, constraints and actions to overcome them. The contribution of IMCI to national child health programmes and interventions and the processes for partnership and coordination of action in each component should also be addressed. The meeting should consider ways in which IMCI can increase its contribution to the range of child health interventions (including those targeting children in poverty and other special circumstances).

Sections 3, 6 and 7 of the Information Framework may be used as a guide. Group work may be the most effective approach to discussion, each group taking one component after initial presentations.

This section will require one and a half days.

d. Review of the structure and organisation of Child Health activities in the country

The aim will be to analyse critically the existing structures and organisations and make proposals for strengthening the coordination of child health care in the country, including IMCI.

Presentations may be made by senior staff of the Child Health division and districts, as well as by senior staff from child health programmes and IMCI. A short group session may be used to stimulate participants to think widely about possibilities for effective structures and mechanisms, including ideas for involving the private and NGO sectors as discussed in session 2.

The recommendations from this session should concentrate on practical coordination mechanisms that will achieve the best use of resources to meet the child health needs discussed in session 1.

Sections 2, 3 and 4 of the Information Framework may be used to guide this session. The session will require at least half a day

e. Debriefing and reporting

On the last afternoon of the visit a meeting should be arranged to bring together high level staff from the Ministry of Health and other concerned ministries, staff of the programmes and institutions concerned with child health, NGO and private organisations, stakeholders and partners. The team will present for discussions its findings and conclusions.

The final report of the analytic review will be shared with the national health authorities when it is available.

5. Field visits

The workshop is limited to three days and field visits will be arranged only if some issues can not be clarified through discussions and reviews of available data. The review team may split for this purpose.

6. Expected Outcome of the Country Visit

- A description of the current child health situation in the country;
- A summary of the remaining challenges in child health, existing interventions to address them and possible gaps, main achievements and constraints of existing child health programmes including IMCI;
- Better understanding of the place of IMCI in child health programmes;
- Recommendations on how IMCI contributions in addressing the remaining challenges could be increased and how selected elements of the strategy could be scaled up; and
- Recommendations for the coordination and management of child health activities to make the best use of available public and private resources.

Questions to guide interviews

Annex 4

1. What activities does the programme/organization carry out in relation to children under 5?
2. What are the aims and objectives of your programme/intervention?
3. What is your target population? What priorities have been established in deciding on this target? Is priority given to economically deprived or other special groups?
4. What type of actions are planned and implemented at different levels (community, district, national, as appropriate)?
5. What are the channels through which the target group has access to the interventions offered by your programme/intervention?
 - a. Public
 - b. Private (formal or informal)
6. What has been the experience of coordination of public, NGO and private sector partners at different levels in relation to the programme/intervention?
7. Who are your major partners - operational and funding?
8. What are the major sources of funding? Government? External support? Other?
9. What have been the achievements of your programme/intervention in relation to objectives? What proportion of the population has access to the interventions? What proportion of the poorer and “unreached” sections of the population has access?
10. What have been the major constraints to achievement of objectives, including access and utilisation?
11. What do you know about IMCI; its objectives, methodology, relationship with existing programmes, strengths and weaknesses?
12. How do the activities of your programme/intervention relate to IMCI plans/activities, globally and at different levels in countries? How are they coordinated with related IMCI activities? Consider:
 - a. skills development/training
 - b. delivery of care for common illnesses
 - c. preventive actions
 - d. counselling
 - e. health service strengthening
 - f. supervision
 - g. referral care
 - h. community health activities.

13. What has been the contribution **from** IMCI towards the implementation and objectives of your programme/ interventions?
14. How has your programme/intervention contributed **to** IMCI - in the development phase/in early implementation phase/in the expansion phase?
15. What has been the role of your programme in:
 - a. development of IMCI strategies and plans
 - b. development of IMCI materials and tools for planning, implementation and monitoring
 - c. implementation of IMCI activities
 - d. funding for IMCI?
16. What does IMCI do or offer that could support the achievement of the objectives of the programme?
17. Has IMCI presented any problems to the implementation of your programme/intervention?
18. What do you think is the “added value” of IMCI to child health care?
19. What do you think is needed to make IMCI more effective – locally or nationally?

Additional questions for funding partners

1. What are the priorities of your agency in the area of child health?
2. How does your agency support child health? Direct funding for programmes, pooled funding (SWAPs?), other?
3. Past, present and projected funding levels?
4. What are the facilitating factors and constraints of the funding systems in place?
5. What are the major constraints to expansion of child health activities?
6. What has to be done to achieve greater impact in the area of child survival/health?
7. How does IMCI fit within the programme of support for child health?
8. What are the expectations of IMCI in relation to your priorities? Are they being fulfilled?
9. What are your present plans for support to child health and IMCI?

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