

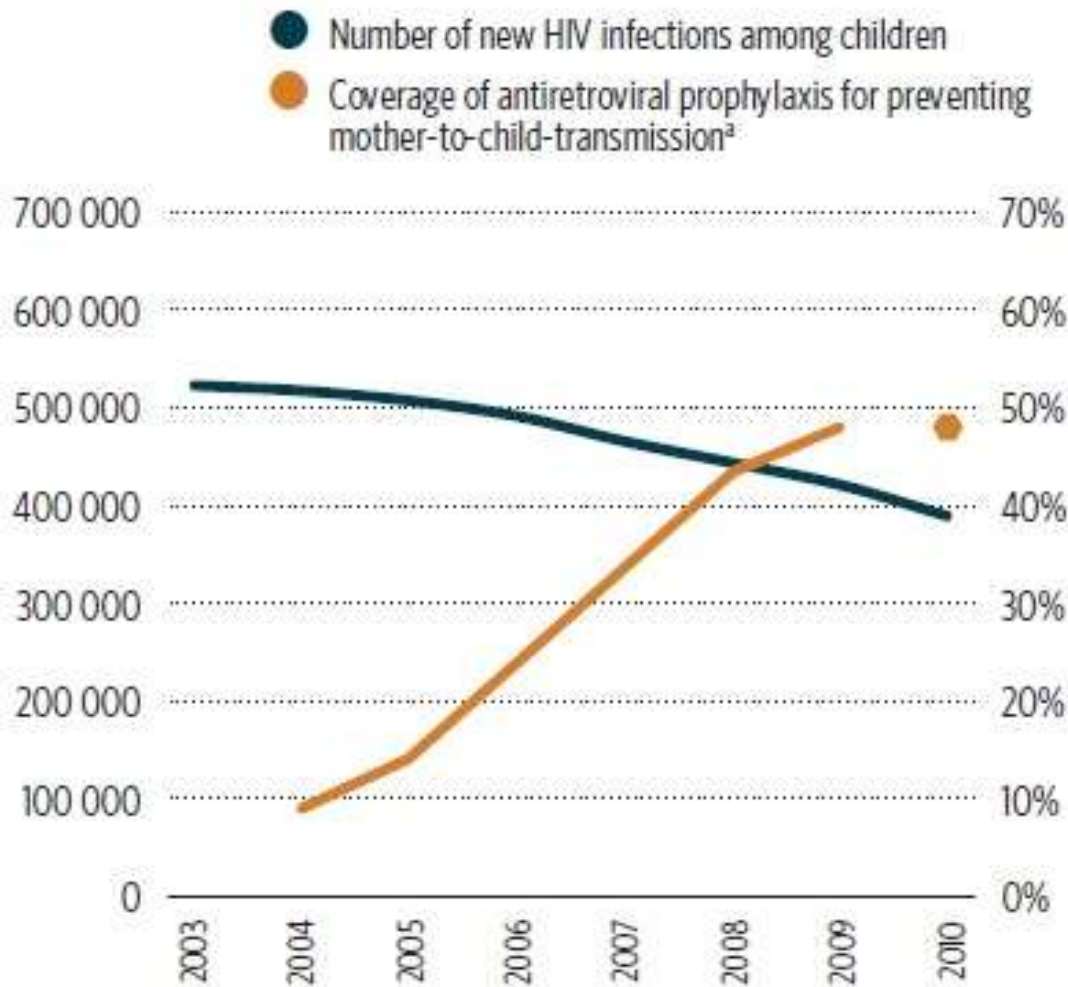
Care for early child development in the context of HIV

Translating research into recommendations and global policy

Nigel Rollins

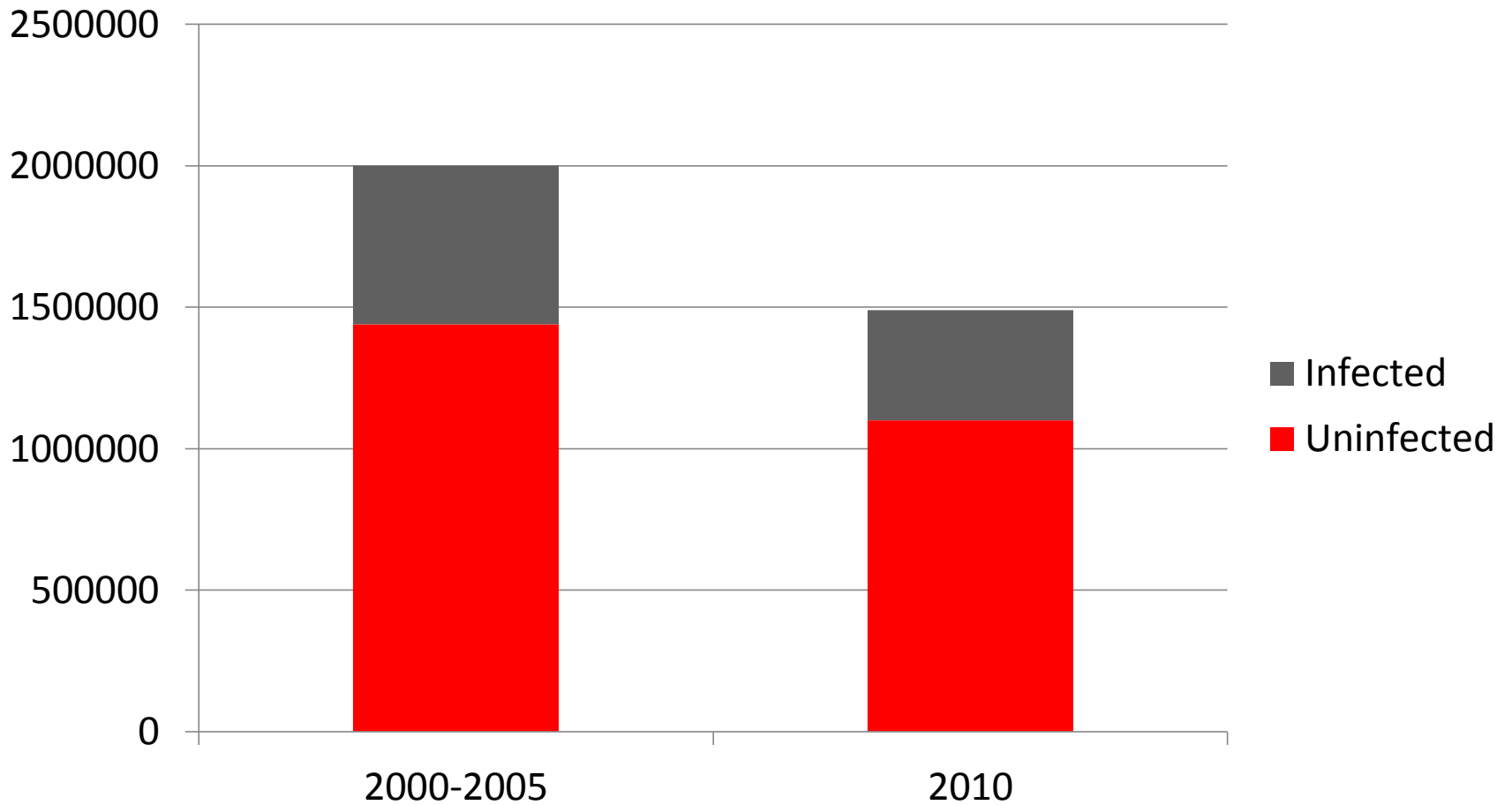
Department of Maternal, Newborn, Child and Adolescent Health

Fig. 1.2 Coverage of antiretroviral prophylaxis for preventing the mother-to-child-transmission of HIV and the number of new HIV infections among children, low- and middle-income countries, 2003-2010



a Coverage before 2010 includes single-dose nevirapine, which is no longer recommended by WHO. Coverage in 2010 does not include single dose nevirapine.

HIV-exposed children still vulnerable

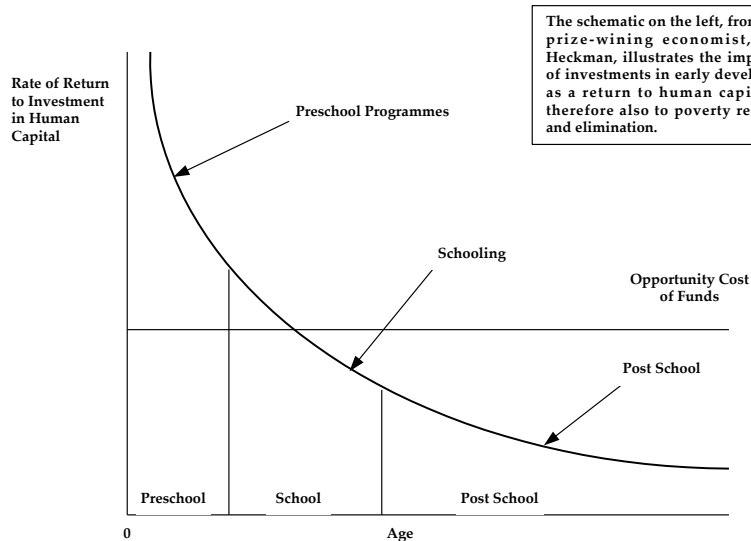






The case for investing in interventions to improve early child development

Figure 1: Rates of Return to Human Capital Investment Initially Setting Investments to be Equal Across all Ages



Rates of Return to Human Capital Investment Initially Setting Investments to be Equal Across all Ages

Early childhood development—global action is overdue



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See Editorial page 1270
See Series page 1275 and 1277

In 2007, *The Lancet* declared that early childhood development was a global challenge of the greatest urgency.^{1,4} 4 years later, we have made progress, but still have far to go in making early childhood development the global priority it must be.

The importance of early childhood development remains profound. As the accompanying papers^{5,6} in *The Lancet* show so clearly, the prenatal and postnatal periods are the most critical time in a child's development, laying the foundation for physical, emotional, and intellectual wellbeing. Dietary deficiencies, inadequate feeding practices, chronic infections, and low levels of stimulation during this period jeopardise a child's chance to reach his or her full potential and increase the risk that poor health and poverty will follow that child into adulthood. Exposure to multiple deprivations increases these terrible consequences.

Not surprisingly, children in the most disadvantaged quintiles of their societies are at the greatest risk of being deprived during this crucial early period. As the *Lancet* papers show, interventions directed at the poorest children can provide enormous returns on investment.^{5,6} For example, home and community-based parenting and family support programmes significantly benefit the youngest children by promoting physical, cognitive, and emotional development, especially when they are integrated with other health, nutrition, and child-protection interventions. For children aged 3–6 years, organised early childhood learning centres not only improve school readiness but also school attainment. In turn, children who remain—and succeed—in school are more likely to earn higher incomes as adults, and to provide better nutrition, health care, stimulation, and educational opportunities to their own children. Furthermore, early childhood development interventions have a substantial impact on children affected by violence, disability, and developmental delays.⁷

That is why it is so alarming that the poorest and most vulnerable children who are most likely to benefit from early childhood development programmes are also least likely to have access to them. According to the World Bank, the Organisation for Economic Co-operation and Development countries spend an estimated 1.6% of their gross domestic product (GDP) on family services and preschool for children aged 0–6 years, and 0.43% of

GDP on preschools alone. By comparison, low-income countries such as Nepal, Kenya, and Tajikistan spend just 0.1% of GDP on preschools, while Nicaragua and Senegal spend less than 0.02%.^{8,9}

Neglect of young children most in need is an outrage—and a huge strategic mistake. Focusing on reaching these children is not only the right thing to do, it is a highly cost-effective investment that countries can and must make for their long-term growth. To cite just one example raised in the *Lancet* papers, increasing preschool enrolment rates to 25% could yield an estimated US\$10.6 billion through higher educational achievement, while a 50% increase could generate \$33.7 billion.⁶ Such investments in centre-based early childhood development yield even greater dividends when they are coupled with community-based nutrition and parenting programmes.

The two *Lancet* papers present new evidence on the causes and consequences of developmental inequities in early childhood—and the exceptional opportunity we have to redress them. We must not ignore this evidence. Instead, we must act on it, working together to make safe and supportive early childhood development a reality for the world's poorest and most vulnerable children. Increased investment is needed in quality parenting programmes and organised early learning centres for the most disadvantaged children. These services should also be better integrated into existing community-based programmes across a broad range



Editorial

HIV in Maternal and Child Health: Concurrent Crises Demand Cooperation

The *PLoS Medicine* Editors*

July 2010

- Funds for HIV are limited and appear to be on the decline
- Funders are demanding more return on their investments
- Fear over the ability to sustain vertical programmes
- Other global initiatives demanding broader perspectives and collaboration
 - UN Secretary General's Strategy for Women and Children's Health
 - H4+
 - Global Health Initiative

- HIV infection noted as a biological risk for child development

Series

 **Child development in developing countries 1**


Developmental potential in the first 5 years for children in developing countries

**Sally Grantham-McGregor, *Yin Bun Cheung, Santiago Cueto, Paul Glewwe, Linda Richter, Barbara Strupp, and the International Child Development Steering Group†*

Lancet 2007; 369: 60-70
See Comment page 61
*Lead authors
†Steering group listed at end of the paper
This is the first in a Series of three articles about child development in developing countries
Centre for International Child Health, Institute of

Many children younger than 5 years in developing countries are exposed to multiple risks, including poverty, malnutrition, poor health, and unstimulating home environments, which detrimentally affect their cognitive, motor, and social-emotional development. There are few national statistics on the development of young children in developing countries. We therefore identified two factors with available worldwide data—the prevalence of early childhood stunting and the number of people living in absolute poverty—to use as indicators of poor development. We show that both indicators are closely associated with poor cognitive and educational performance in children and use them to estimate that over 200 million children under 5 years are not fulfilling their developmental potential. Most of these children live in south Asia and sub-Saharan Africa. These disadvantaged children are likely to do poorly in school and subsequently have low incomes, high fertility, and provide poor care for their children, thus contributing to the intergenerational transmission of poverty.

- Few robust evaluations of interventions.

Child Development 2 

Strategies for reducing inequalities and improving developmental outcomes for young children in low-income and middle-income countries

Patrice L. Engle, Lia C.H. Fernald, Harold Alderman, Jere Behrman, Chloe O'Gara, Aisha Yousafzai, Meena Cabral de Mello, Melissa Hidrobo, Nurper Ulkuer, Ilgi Ertem, Selim Iltus, and the Global Child Development Steering Group

Lancet 2011; 378: 1339-53
Published Online
September 23, 2011
DOI:10.1016/S0140-6736(11)60889-1
See Editorial page 1276
See Comment page 1277
This is the second in a Series of two reports about child development
Psychology, California Polytechnic State University, San Luis Obispo, CA, USA

This report is the second in a Series on early child development in low-income and middle-income countries and assesses the effectiveness of early child development interventions, such as parenting support and preschool enrolment. The evidence reviewed suggests that early child development can be improved through these interventions, with effects greater for programmes of higher quality and for the most vulnerable children. Other promising interventions for the promotion of early child development include children's educational media, interventions with children at high risk, and combining the promotion of early child development with conditional cash transfer programmes. Effective investments in early child development have the potential to reduce inequalities perpetuated by poverty, poor nutrition, and restricted learning opportunities. A simulation model of the potential long-term economic effects of increasing preschool enrolment to 25% or 50% in every low-income and middle-income country showed a benefit-to-cost ratio ranging from 6·4 to 17·6, depending on preschool enrolment rate and discount rate.

Rationale and evidence in support of care for ECD in the context of HIV

- Decrease in children infected by HIV but still affected
- High levels of vulnerability with likely overlapping risk factors
- Opportunity for early access and intervention
- 'Efficiency'



Evidence to global policy

Evidence to recommendations

- Clarity and agreement on the benefits
- Supporting evidence base

..... Recommendations to policy

- Effective advocacy and political backing
- Defined package of interventions that work
- Systems that can support interventions
 - Health and other sectors
- Accountability framework
- Opportunity / Opportunism

RATING QUALITY OF EVIDENCE AND STRENGTH OF RECOMMENDATIONS

GRADE: an emerging consensus on rating quality of evidence and strength of recommendations

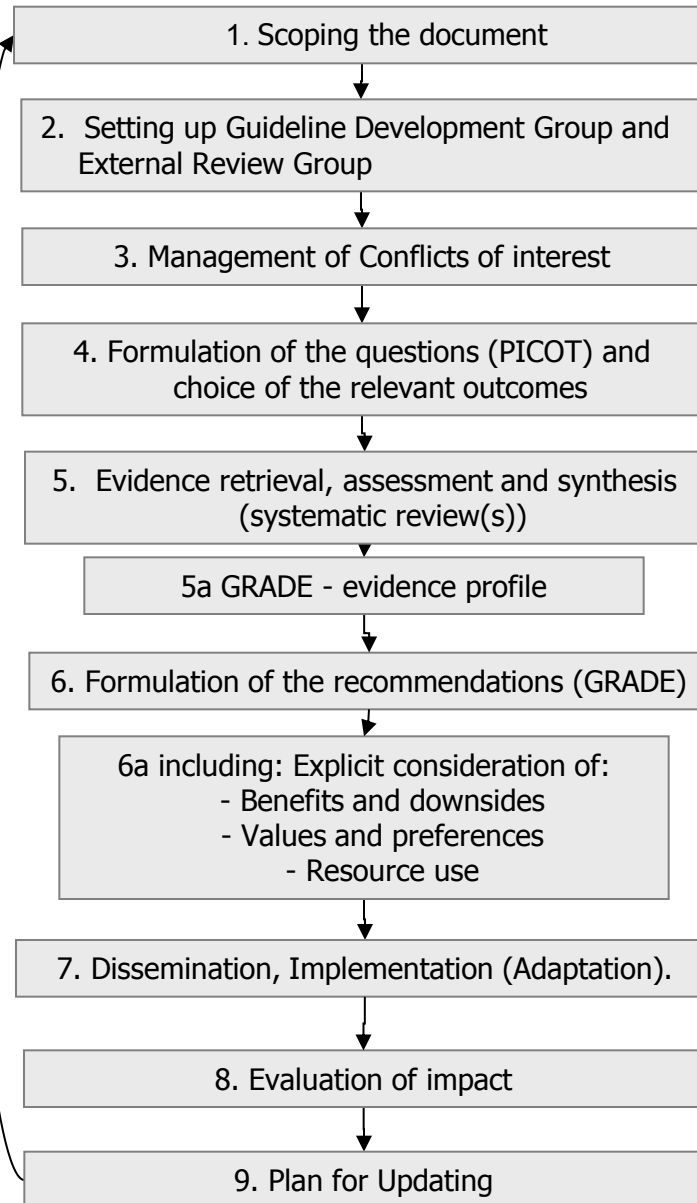
Guidelines are inconsistent in how they rate the quality of evidence and the strength of recommendations. This article explores the advantages of the GRADE system, which is increasingly being adopted by organisations worldwide

BMJ | 26 APRIL 2008 | VOLUME 336

Grades of **R**ecommendation **A**ssessment, **D**evelopment and **E**valuation

CMAJ 2003, BMJ 2004, BMC 2004,
BMC 2005, AJRCCM 2006, Chest
2006, BMJ 2008

Overview of WHO guideline process



The GRADE approach

For a body of evidence:

Clear separation of 2 issues:

- 1) 4 categories of quality of evidence: very low, low, moderate, or high quality?
 - methodological quality of evidence
 - likelihood of bias
 - by outcome
- 2) Recommendation: 2 grades - weak or strong (for or against)?
 - Quality of evidence only one factor

Evidence to global policy

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..... Recommendations to policy

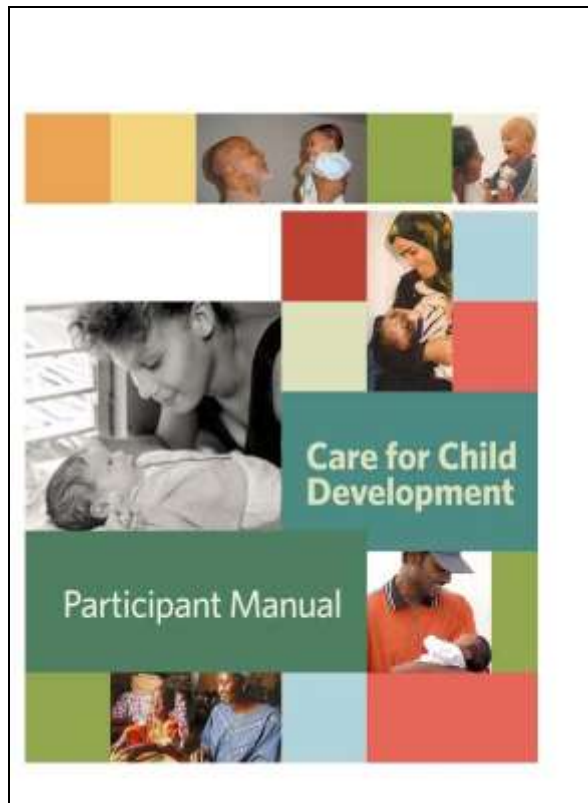
- Effective advocacy and political backing
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Care for early child development: Translating research into global policy

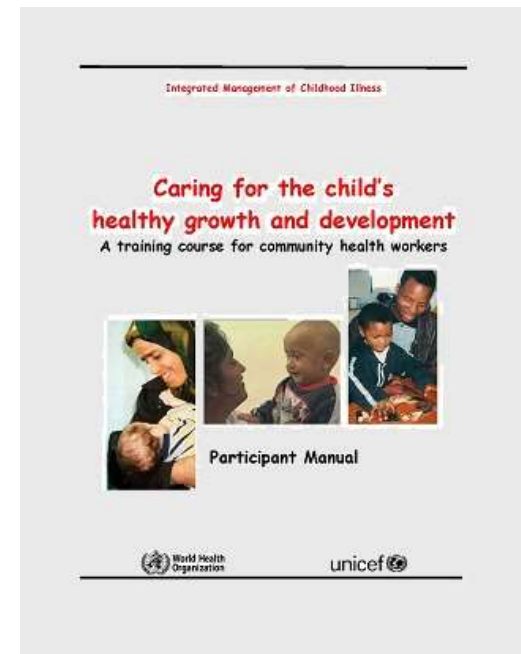
- Strong and coherent rationale
- Evidence-based package of interventions
- Training package
- Political support
- Accountability framework
- Opportunity – growing momentum

WHO/UNICEF tools

- For health professionals and CHWs to enhance skills to support care for development



- For community health workers to build their skills to support integrated child care (health, feeding and development)



Community health workers: a key resource

28/47 countries in Africa and Asia have CHWs making home visits to newborn babies

19 countries in Africa allow CHWs to identify and treat sick children

CHWs are a key resource to counsel on healthy growth and development:

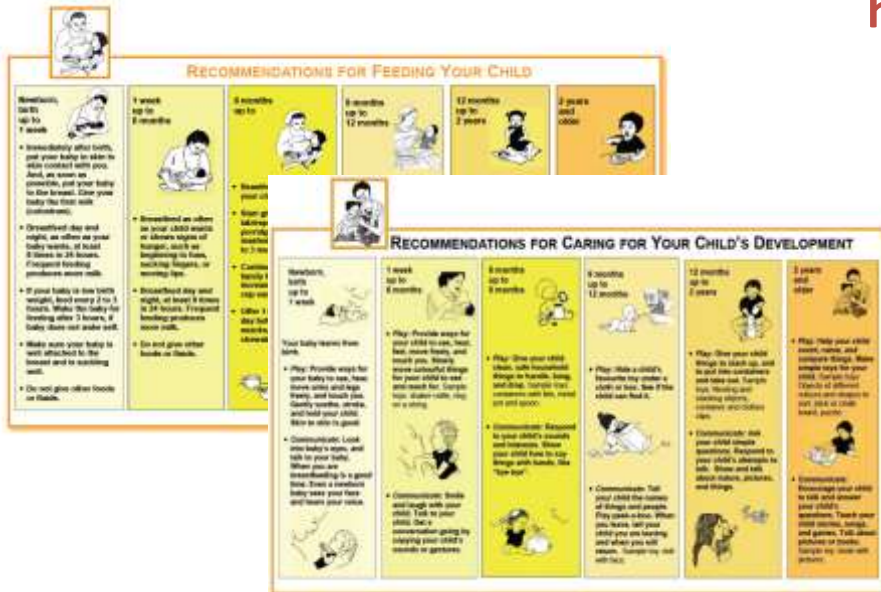
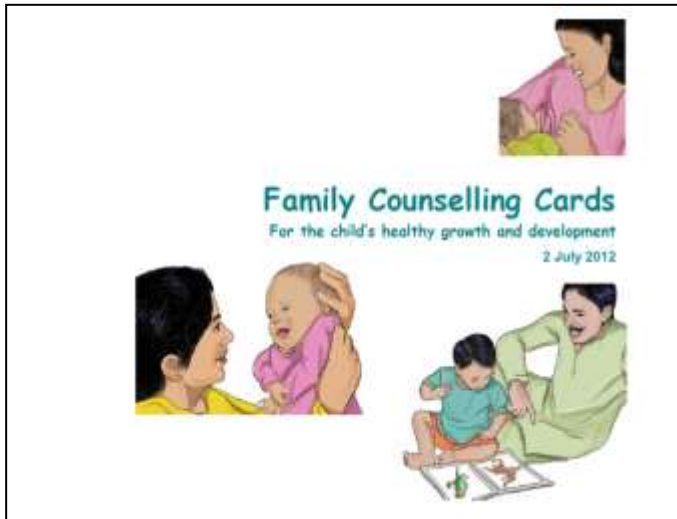
Feed your child

Play and communicate with your child

Prevent illness

Respond to illness

Adapted and tested in: South Africa (Nurses), Turkey (Paediatricians), Pakistan, India, Malawi (CHWs), China (Family Physicians) and Tajikistan, Kirgizstan, Kazakhstan (Primary health facility nurses)



The intervention: Care for child development

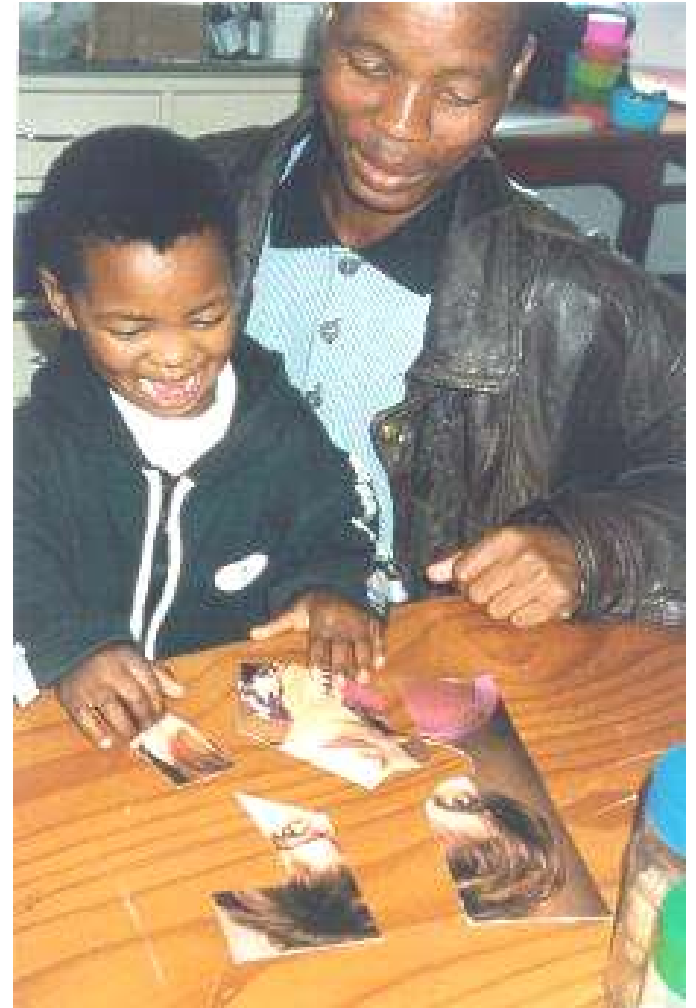
- Starts with improving the **skills of health providers and others who work with families**
- Provides tools for **counselling families on play and communication activities**
 - to stimulate the child's learning
 - to strengthen caregiving skills and the interaction between caregivers and their children
 - to prevent and solve problems in care
- Demonstrates the use of principles of child development to improve routine care practices, including the **feeding of newborns and young children**



Age 12 months up to 2 years:

Give your child things to stack up, and to put into containers and take out.





Age 2 years and older:

Help your child count, name, and compare things. Make simple toys for your child.

'...the promotion of early child development requires common understanding, shared commitment, and united action across government agencies and institutions.'

M.Chan, Director-General, WHO
Lancet 2013; 381:1514-1515.



Action on ECD in WHO

- January 2013, WHO hosted a meeting on: *Nurturing Human Capital along the Life Course: Investing in Early Child Development*. Four objectives:
 1. To describe promising ongoing research on pathways and factors that influence children's development;
 2. To share evidence of effective interventions to promote ECD using a life course approach;
 3. To review indicators and tools for measurement of ECD
 4. To discuss translational issues for low- and middle-income countries to deliver integrated ECD services at high levels of coverage.

Road Map in WHO

1. Prepare a **consensus/joint statement** on ECD and the contributions of the health sector to deliver universal coverage along the life course.
2. Facilitate the preparation of a **special series** on the theme of ECD and the role of the health sector. (Bulletin WHO)
3. Develop a guidance document on the **role of the health sector in promoting ECD** specifying how services /linkages enhanced for groups at risk.
4. Develop a set of clear **appealing messages targeting policy makers** and positioning ECD in the post 2015 agenda.
5. Develop a **framework for developmental monitoring and evaluation**, including facilitating standardization of terminology, definitions and concepts.
6. Conduct a landscape analysis of research and create a platform of scientists for dialogue

Knowledge Gaps

- Build evidence around the implementation science for integrated ECD services at scale.
- Knowledge about ECD of high risk children
- Health system readiness needs to be evaluated prior to introduction of new interventions
- Learn lessons from other sectors and success stories within health on feature of success for scaling up interventions.
- For the front line worker:
 - Collaborations for pre and in- service training with professional organizations
 - Training and Supervision Techniques
 - Move away from traditional medical approaches to training.
- *Guidance on linkages across sectors to ensure additional supports are provided and accessed by at risk young children and their families.*

Protecting the Future Alliance

- February 2013. Bellagio Conference Center
- A research strategy on Protecting and promoting children's developmental potential
 1. Strengthen our understanding of how adversities challenge children's development in LMICs, and how opportunities and strengths can promote development in such contexts
 2. Test, refine and scale interventions that have shown promise

Care for early child development in the context of HIV: Translating research into global policy

- Strong and coherent rationale for including HIV – 'it makes perfect sense'
- Evidence-based package of interventions
- Training package
- Political support
- Accountability framework
- *Opportunity*



In the context of HIV

Need to unpack ...

- What are the HIV-related specificities and opportunities
 - Research agenda
- Commitment to bidirectional gains
- What is the capacity of systems to do it all
- Where is the balance



