Implementation
Research, Practice &
Partnerships:
Informing a
Multisectoral
Approach for ECD

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Child development in developing countries

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

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 outcomes for children. Over 250 million children under 5 years of age in Asia and sub-Saharan Africa have the highest levels of early childhood stunting and high poverty, high fertility, and low incomes, high fertility, and high rates of poverty.

250 Million children not meeting their developmental potential (Grantham-McGregor et al., Lancet, 2007)
Goal 4, Target 4.2: By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.

Goal 1, Target 1.2: Halve poverty

Goal 2, Target 2.2.: End hunger

Goal 3, Target 3.2: End preventable deaths of newborns and under-fives

Goal 16, Target 16.2: End abuse, exploitation, trafficking and all forms of violence against and torture of children.
Overview

- The Nurturing Care Framework: A Road Map for Multisectoral Approaches for ECD
- Evidence-Based Principles for Creating Nurturing Care Interventions for ECD
- Addressing Challenges and Opportunities in Implementing Multisectoral Approaches through Research & Practice
- Strong Partnerships
The Nurturing Care Framework: A Road Map for Multisectoral Approaches for ECD
Nurturing Care Framework

• All sectors have a responsibility to provide services to meet the needs of young children.
• Promote new interventions in current programmes:
  • E.g. Integrate early learning advice in health services.

• Work differently with caregivers so they are empowered with the knowledge, skills, competencies and resources to:
  • Meet the physical and emotional needs of children
  • Protect children from harm
  • Provide early learning opportunities for children
  • Interact in responsive, emotionally supportive and cognitively stimulating ways with children.

• Strengthen cross-sector partnerships.
  • Plan and invest in cross-sector national plans to support young children.
  • Share expertise.
  • Co-ordinate services.
Evidence-Based Principles for Creating Nurturing Care Interventions for ECD
Evidence-Based Principles for Creating Packages of Nurturing Care Interventions for ECD

- Start early
- Provide multiple protective inputs to promote nurturing care and mitigate risks
- Support child and parents/caregivers
- Boost development in the life course
Sensitive Periods and the Developing Brain

[Thompson & Nelson, 2000]
Starting Early to Reduce Inequalities

[Walker et al., 2011]
Recommendations for Care for Child Development

Promote Opportunities for Early Learning:
10-41% of households in low- and middle-income countries (LMIC) provided stimulation materials. [Source: UNICEF MICS].

Support Responsive Caregiving:
11-33% of parents involved in play with children. Play is a good context to guide parents to understand their child’s cues. [Source: UNICEF MICS].

- Give your child affection and show your love
- Be aware of your child’s interests and respond to them
- Praise your child for trying to learn new skills
Health Cards: Example from UNICEF Moldova
Well Baby Visits in Primary Health Care Services In the Caribbean

- Stimulation and care advice was promoted for children aged 18 months in 5 routine well-baby visits in primary health care facilities (Chang et al. Pediatrics, 2015)

- **Intervention:**
  - While parents and children were in the waiting room, community health aides showed a short video on stimulation and demonstrated activities parents could try with their child.
  - In the health visit, nurses re-enforced the advice and provided parents with recommendation cards and some playthings to take home.

- **Benefits:**
  - Significant benefits in children’s cognition, language and vocabulary, and hand-eye coordination.
Evidence-Based Principles for Creating Packages of Nurturing Care Interventions for ECD

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Multiple Risks Threaten Children’s Early Development

**Biological**
- Malnutrition
- Low Birth weight, Intra-uterine growth restriction
- Infectious illnesses
- Environmental pollutants

**Psychosocial**
- Inadequate stimulation and early learning opportunities
- Poor quality responsive caregiving
- Maternal depression
- Institutional care
- Exposure to violence
Postnatal Nutrition Interventions and Cognitive Development

- Benefit early child nutritional well-being
- Modest impact on early child development

[Aboud & Yousafzai, Annual Review of Psychology, 2015]
Stimulation Interventions and Cognitive Development

- Medium-to-high impact on early child development

[Aboud & Yousafzai, Annual Review of Psychology, 2015]
• *In other words* nutrition and stimulation implemented together benefit multiple child outcomes.

• The first 1000 days is a sensitive window of opportunity for both interventions.

• The parent/caregiver is provided advice that addresses her infant’s physical and mental development.

• The health worker can integrate both messages.
<table>
<thead>
<tr>
<th>Country</th>
<th>Delivery Platform</th>
<th>Delivery Agents</th>
<th>Delivery Strategy</th>
<th>New Intervention Added</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia (rural)</td>
<td>Conditional cash transfer</td>
<td>Volunteer Mother Leaders</td>
<td>Weekly home visits over 18 months</td>
<td>Stimulation, Nutrition</td>
<td>Learning &amp; Language</td>
</tr>
<tr>
<td>Uganda (IDP)</td>
<td>Emergency feeding centres</td>
<td>Psychosocial Facilitator</td>
<td>Weekly group sessions and home visits over 6 weeks</td>
<td>Stimulation</td>
<td>Care &amp; Maternal Mental Health</td>
</tr>
<tr>
<td>Pakistan (rural)</td>
<td>Community Health Service</td>
<td>Community Health Worker</td>
<td>Monthly home visits and monthly group sessions and home visits over 24 months</td>
<td>Stimulation, Enriched Nutrition</td>
<td>Learning, Language &amp; Motor Development, Child Health, Care Maternal Mental Health,</td>
</tr>
</tbody>
</table>
Evidence-Based Principles for Creating Packages of Nurturing Care Interventions for ECD

- Start early
- Provide multiple protective inputs to promote nurturing care and mitigate risks
- Support child and parents/caregivers
- Boost development in the life course
Parenting and Nurturing Care

- Caregiver knowledge, attitudes, practices, skills
- Caregiver’s physical and emotional well-being
- Caregiver’s access to resources to invest in children (e.g. conditional cash transfer, child care)
- Two-Generational Approaches: Skills Development for Parents (e.g. vocational training)
- Investment in frontline workforce (e.g. early childhood educators, child protection officers)
Evidence-Based Principles for Creating Packages of Nurturing Care Interventions for ECD

- Start early
- Provide multiple protective inputs to promote nurturing care and mitigate risks
- Support child and parents/caregivers
- **Boost development in the life course**
Life-course approach

[Lancet Series on Child Development, 2017]
Lesson from Pakistan

Age 2 Years: Access to Parenting Programme

- Parenting interventions delivered by community health workers benefitted children’s early development.

[Yousafzai et al., LGH, 2016; Lancet, 2014]
Evidence-Based Packages of Nurturing Care

**Family Support & Strengthening Package**
- Access to quality services, skills building, support

**Multigenerational Nurturing Care Package**
- Care and protection of mothers’ and fathers’ physical and mental health and wellbeing, and their capacity to provide nurturing care

**Early Learning & Protection Package**
- Integrates support for young children with parental and caregivers’ support to create a nurturing learning environment

[Britto et al., Lancet, 2017]
Example of a Multisector Programme: Chile Crece Contigo

The Programme

• Provides health, early learning and social protection care prenatally-4 years.

• Led by Ministry of Social Development in partnership with the Ministries of Health and Education.

• Brings together government and non-government service providers.

Features of Success

• Science: Starts early, multiple inputs, addresses needs of caregivers and children.

• Addresses a gap in services.

• High level of leadership and good governance.

• Inter-sectoral coordination with good communication, defined roles & responsibilities, and trust.

• Partner engagement.
Addressing Challenges and Opportunities in Implementing Multisectoral Approaches through Research & Practice
Achieving Impact at Scale

• Many good programmes cannot demonstrate how they are good
• Many not-so-good programmes think they are good
• Many programmes in the middle need a roadmap for how to get better

Therefore:
• What do we need to learn to effectively transition programmes from ‘small to big?’
• What do we need to learn to effectively transition programmes from ‘big to better?’
• What do we need to do to reach all children?
Implementation Research and Practice

The study of methods to promote the integration of research findings and evidence into healthcare policy and practice. It seeks to understand the behaviour of healthcare professionals and other stakeholders as a key variable in the sustainable uptake, adoption and implementation of evidence-based interventions... Fogarty International Centre, NIH, US.
Respond to Capacity Need

Quality Improvements

Delivery

Cost & Finance

Enabling Contexts

Integration

Workforce

Data & Evidence Systems

Advocacy & Demand

Adaptations

[Britto et al., ANYAS, 2018]
Lesson 1: Iterative and collaborative approach to designing scalable interventions

- Vertical approach to scale will not work.
- Design from the outset a scalable unit/prototype based on context.
Context Mapping for Designing Effective Multisectoral Approaches

1. What are the socio-cultural caregiving practices pertaining to health, nutrition, safety, and development?

2. What platforms exist for integration of early childhood interventions? What is the readiness for integration? What are the structures and processes we need to consider for designing a scalable package?

3. What are the best practices to help caregivers navigate multiple services and programmes?

4. How can coordination for services be optimized (e.g., making referrals, ensuring continuity of services for children and their caregivers, sharing data)?

5. Is information provided to caregivers and children consistent across sectors?

6. Is there an enabling environment for sectors to work effectively together (e.g. share vision, policies, governance and accountability)?
- **Proof-of Concept**

- **Effectiveness Trial**

- **Large-Scale Demonstration Project**

- Vertical approach to scale will not work.

- Design from the outset a scalable unit/prototype based on context

  - **Theory of change**

  - Evidence-based on *what works for which outcomes*.

  - Adapted curriculum- aligned with existing service.

  - Iterative testing and modifications in existing service.
Theory of Change (TOC)

Studies reporting TOC (N=349)

- Programmes with a clear TOC associated with significantly improved child outcomes (Segal et al, Millbank Quarterly, 2012)
- In the TOC, objectives, components and measures of success align to needs of population.
- TOC understood by providers and beneficiaries.

[Source: Yousafzai, Shankar et al., 2018]
Test and Modify Interventions In Services

- Ghana (Twum-Danso et al. 2013)
  - Quality improvement method for scaling-up early post-natal care.
  - 30 teams from facility and community-based services.
  - Learning Workshops every quarter.
  - Improved access to early post-natal care in 48hrs from 15% to 71% in 10 months
Lesson 2: Integrate Behaviour Change Techniques that Encourage Uptake of Interventions

- Small media (R=0.51)
  - Small posters, cards, brochures illustrating stimulation practices

- Performance (R=0.34)
  - Demonstrations, engage caregivers, coaching and feedback

- Problem-solving (R=0.34)
  - Discussion about how to overcome barriers to change

- Social support (too infrequent to assess its value)
  - Motivating peers, family members, trusted figures to encourage parents

- Provision of materials (R=-0.23)
  - Low-cost play materials and picture books

- More techniques rather than fewer (R=0.44)

[Aboud & Yousafzai., Annual Rev. Psych. 2015]
Lesson 3: Invest in a Skilled Workforce

- Supportive supervision, with feedback, associated with successful outcomes (Tomlinson et al., ANYAS, 2018).

- Evidence suggests a minimum fortnightly contact (Yousafzai & Aboud, ANYAS, 2014)

- Aided by supervision tools; however few interventions report using tools:
  - 4.7% nutrition studies
  - 11.7% parenting
  - 12% combined

[Source: Yousafzai, Shankar et al., 2018]
Supervision Contact with Lady Health Worker in Pakistan, 2011

- Requires feedback loop: Fosters dialogue and empowers providers
- Upgrade skills of supervisors
- *There is a positive change within us, we have become more confident...Mothers listen and follow...Mothers also praise us and we feel happy* [PEDS Trial, LHW]
- *Now with LHW visiting more and advising more, there is a difference in the children and us, we have learned a lot which will help us do something good for our children* [PEDS Trial, Mother]
Lesson 4: Promoting Demand

Dynamic, Interactive, Evolving

Opportunity and Initiation of Collective Actions

Organizing a Community of Purpose

Agency

Awareness
Program to Improve Private Early Education (PIPE), FSG

200,000+
Low income children having better learning outcomes annually

A system on its way to transformation

**Demand**

~1.2m Parents Assessing conceptual learning (as opposed to current rote learning)

**Supply**

6-8 High quality companies serving 1000s of APSs sustainably

~3200 Affordable Private Schools using developmentally appropriate pedagogy

Program to Improve Private Early Education (PIPE), FSG

Low income children having better learning outcomes annually
Lesson 5: Measure Implementation and Impact

- Implementation (Aboud & Prado, ANYAS, 2018):
  - Fidelity (dose delivered, content delivered, approach to delivery)
  - Cost.
  - Find out why something is working or not working?

- Impact (Aboud & Prado, ANYAS, 2018):
  - Caregiving processes (learning resources in the home, interactions)
  - Caregiver outcomes (e.g., stress, access to services)
  - Child development, nutrition, health

- Integrate:
  - Early childhood programme indicators in health, education and protection systems.
  - Find out what is the impact of integration on services?
<table>
<thead>
<tr>
<th>Service Received</th>
<th>ECD/Nutrition</th>
<th>ECD</th>
<th>Enhanced Nutrition</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Mother/Child health counselling</td>
<td>76%</td>
<td>78%</td>
<td>46%</td>
<td>5%</td>
</tr>
<tr>
<td>Hand washing advice</td>
<td>76%</td>
<td>75%</td>
<td>46%</td>
<td>5%</td>
</tr>
<tr>
<td>Medicines received</td>
<td>77%</td>
<td>45%</td>
<td>51%</td>
<td>13%</td>
</tr>
<tr>
<td>Mother/Child received nutrition supplements</td>
<td>45%</td>
<td>48%</td>
<td>54%</td>
<td>5%</td>
</tr>
<tr>
<td>Advice on EBF</td>
<td>48%</td>
<td>61%</td>
<td>53%</td>
<td>61%</td>
</tr>
<tr>
<td>Advice on why mothers breast milk is sufficient 0-6m</td>
<td>48%</td>
<td>57%</td>
<td>49%</td>
<td>2%</td>
</tr>
</tbody>
</table>

[Yousafzai, Rasheed, Siyal, ANYAS, 2018]
• **Tools to capture nurturing care strategies:**
  • Capture change over time
  • Capture quality of relationships
  • Assess at multiple time points
  • Ensure stakeholder participation, feedback and action
  • Utilize mixed methods

• **Use Data** (Nores et al., ANYAS, 2018)
  • Multiple levels: National, programme, provider
  • Continuous quality improvements in programmes

• **Disseminate Effectively** (Lombardi et al., ANYAS, 2018):
  • Timely manner
  • Place results in context of other programmes
  • Disaggregate data to learn who is benefitting and who is not benefitting.
  • Present to multiple stakeholders (i.e., policy, programme, community, implementers, researchers)
Strong Partnerships
Research-Practice Partnerships

- Creation of collaborative partnerships to prioritizing implementation questions, developing implementation strategies, assessing implementation and identifying solutions (Yarney, Implementation Science, 2012).

- Establish learning communities in programmes.

  - Example: Home Visiting Research Network (HVRN), US
Fostering and Funding Research Practice Communities

1. Fund implementation evaluations

2. Strengthen research-practice learning networks responsive to the needs of the ECD community in the countries/regions where we work (e.g. including regional and global networks- ARNEC, AfECN, ARC, ECDAN)

3. Establish innovation funds that enable testing of quality improvements in programmes.

4. Improve access to research and programme evaluations.

5. Improve access to learning opportunities and technical workshops that foster applied research culture in programmes.
Summary

• The case for why invest in the early years is strong.

• The case for what to invest in and how to invest using a multisectoral approach requires greater implementation research and practice sharing.

• Business as usual will not help us to achieve a goal of all children thriving.

• Attention needs to paid to strengthening early childhood systems for integration.
Coordination Within and Across Sectors

- Integrated intervention packages should ideally be informed by evidence:
  - Science (when will an intervention be more effective),
  - Feasibility (effective and efficient use of resources, avoid ‘overload’)
  - Strengthening existing platforms and services (alignment and complementarity between interventions and approaches to delivery)

- A multi-sector approach requires:
  - Authority to implement plan, budget, change and govern
  - Development of competencies across system
  - Consistency of messages
  - Mitigation of risks during transitions must be addressed (e.g. from home to school)
Thank you
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