Reach Up: An Early Childhood Parenting Intervention

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The Problem

More than 250 million children (43%) under 5 years in low- and middle-income countries are estimated to be at elevated risk of not achieving their human potential because of stunting or exposure to extreme poverty (Black et al, Lancet 2016)
The Problem

Falling behind so early in life can result in negative impacts on physical, cognitive, and emotional development, education outcomes, and earnings throughout adulthood.
Importance of Early Childhood for Brain Development

- Brain development is most rapid and vulnerable from conception to 5 years.

- Early environment and experiences are critical. Optimal brain development expects and depends on needed experiences.

- The brain is highly sensitive to adversity. Biological and psychosocial risks can lead to deficits in brain structure and function, and in cognitive and social-emotional development.
Early Childhood Development and Equity

- Early life experiences are key factors for equity
- Policies and programs to promote early childhood development can reduce inequality and facilitate gains from later educational/societal opportunities
- Need to scale up programs and investment in early child development as foundation for health, social and economic outcomes throughout the life course
Global Focus on Early childhood development

- The last decade has witnessed an increased prioritization of early childhood development.

- Target 4.2 of the Sustainable Development Goals calls for all children to have access to quality early childhood development and care by 2030.
Early Childhood Development Programmes Are a Policy Imperative

Rate of return on investment in human capital

Programs targeting first years

Preschool programs

Formal Education

Professional training

Heckman J, Science 2006
Global Focus on Early childhood development

- The Lancet series on child development highlights the need for early child development interventions to be integrated into government services.
- In 2018, the WHO launched the Nurturing Care Framework that places responsive caregiving and opportunities to learn for children 0-3 years as critical components of care for young children and calls on government to provide necessary support and services for families who are the primary providers of care for young children.
- Comprises adequate nutrition, access to health care, protection from violence, responsive interactions and opportunities to learn.

Black et al, 2017; Walker et al, 2018
Nurturing Care is Fostered by Supportive Environment

- Families need support from their communities and from government programs and policies that can strengthen their ability to provide nurturing care

Black et al, Lancet 2016
The Jamaica Home Visiting Intervention
Developmental levels of stunted (n=132) and non-stunted (n=32) Jamaican children and benefits of interventions

Impact of interventions

- At end of 2 year trial, each intervention benefited development. Group that received both attained developmental levels of non-stunted group

- Follow up in childhood (7, 11 years) and adolescence (17 years) showed benefits from supplementation faded

- Benefits from stimulation for cognition were sustained and over time benefits for education and psychological functioning emerged.
Benefits at age 22 years

- Education: Higher scores in reading, maths and general knowledge; grade level attained; secondary level examination passes
- Less depressive symptoms and better social skills
- Reduction in violent behaviour
- Higher wages (25%)

Walker et al., Pediat 2011; Gertler et al., Science 2014
Benefits at age 31 years

- Greater IQ and cognitive flexibility
- Reduce depressive symptoms
- Increase grit and conscientiousness
- Lower substance use
- Lower risk taking related to health and work

Walker et al., Journal of Child Psychology and Psychiatry, 2021
Reach Up: An early childhood parenting intervention
REACHUP: Early Childhood Parenting Programme is an innovative, comprehensive training package based on the Jamaica Home Visit Programme.

Aim is to increase capacity of implementing agencies (NGOs and governments) to deliver effective parenting programmes and facilitate scaling for children 0-4 years in LMICs.
Reach Up Package Contents

 ✓ Adaptation and Planning for Program Implementation
 ✓ Toy Manual and play materials

 ✓ Weekly and fortnightly curriculum
 ✓ Training manual and films
 ✓ Supervisor Manual and Handbook; observation checklist

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Key Features of the Intervention

- Parent and child focus
- Interactive play session with parent and child to build the parent’s ability to promote development through playful interactions
- Structured curriculum: Uses play and everyday activities to introduce concepts and language
- Activities matched to child’s ability (challenging but not frustrating)
- Play sessions use homemade toys, songs and games, language activities and picture books.
- Parents encouraged to continue activities and integrate into daily routine
Examples of toys left in home
Organisation

- Weekly, 2 weekly home visits or small group sessions
- Demonstrate play activities and involve mother and child in play
- Encourage mothers to practise activities and continue in the following week
- Curriculum arranged in developmental order
- Adjust according to ability of child
The **Reach Up Model** supports quality at scale through:

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<table>
<thead>
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</table>
| **1** | **Adaptable Curriculum**  
The curriculum provides activities to strengthen the child’s overall development and provides modifications for the child’s ability. |
| **2** | **Low-Cost Toys That Can Be Rotated**  
Inexpensive toys created from recycled materials can be left at the homes and reused at later visits. |
| **3** | **Scalable Structure**  
The programme maintains consistent focus on supportive supervision, while maintaining quality controls. |
| **4** | **Adaptable to Group Format**  
Can be adapted for use in small group sessions and child-care centres |
Evidence base: 19 RCTs

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jamaica</td>
<td>5 studies</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>5 studies</td>
</tr>
<tr>
<td>Colombia</td>
<td>2 studies</td>
</tr>
<tr>
<td>India</td>
<td>2 studies</td>
</tr>
<tr>
<td>Brazil</td>
<td>1 study</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>1 study</td>
</tr>
<tr>
<td>China</td>
<td>1 study</td>
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<tr>
<td>Peru</td>
<td>1 study</td>
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<td>Madagascar</td>
<td>1 study</td>
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Total 19 studies
## Impact of parenting programmes using adaptations of the Jamaica model

<table>
<thead>
<tr>
<th>Study</th>
<th>Country</th>
<th>Study children (target children)</th>
<th>Impact in cognitive and language development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grantham-McGregor et al. (1991)</td>
<td>Jamaica</td>
<td>129 (62)</td>
<td>0.91 SD (Griffiths)</td>
</tr>
<tr>
<td>Hamadani et al. (2006)</td>
<td>Bangladesh</td>
<td>193 (92)</td>
<td>0.28 – 0.33 SD (Bayley-II)</td>
</tr>
<tr>
<td>Attanasio et al. (2014)</td>
<td>Colombia (FeA)</td>
<td>1267 (720)</td>
<td>0.22 – 0.26 SD (Bayley-III)</td>
</tr>
<tr>
<td>Grantham-McGregor et al. (2020)</td>
<td>Odisha, India</td>
<td>1449 (732)</td>
<td>0.24 – 0.32 SD (Bayley-III)</td>
</tr>
<tr>
<td>Bernal et al. (2019)</td>
<td>Colombia (FAMI-CHECH)</td>
<td>1300 (711)</td>
<td>0.15 – 0.36 SD (Bayley-III)</td>
</tr>
<tr>
<td>Hamadani (2019)</td>
<td>Bangladesh</td>
<td>1737 (859)</td>
<td>1.1 – 1.3 SD (Bayley-III)</td>
</tr>
<tr>
<td>Araujo et al. (2021)</td>
<td>Perú (Cuna Más)</td>
<td>5800 (3800)</td>
<td>0.19 – 0.29 SD (Bayley-III)</td>
</tr>
</tbody>
</table>
On-going programs

▪ Syrian Refugees in Jordan & Lebanon *(International Rescue Committee)*
▪ Rohingya refugees in Bangladesh *(icddrb, International Rescue Committee)*
▪ Guatemala *(Child Fund)*
▪ China *(China Development Research Foundation)*
▪ Bangladesh *(Ministry of Health)*
▪ Jamaica *(Ministry of Health and Wellness)*
Preparing for implementation

Adaptation of curriculum and materials

- Cultural Practices especially child rearing practices
- Available materials
- Adaptation:
  - Books & Pictures
  - Play Materials & Games
  - Local songs and games

Steps in Setting up a Programme

- Initial Steps (meetings, recruitment of key staff)
- Play Materials (sourcing recyclables and manufacture)
- Training
- Implementation and monitoring
Key Features of the Reach Up Programme for Public Policy

- Integration into an existing system (e.g. health, social policy)
- Adaptable to the context (e.g. mode of delivery home visiting or group)
- Structured training program
- Structured Curriculum (provides better support for visitors/facilitators)
- Monitoring and evaluation (e.g. tools for supervision/mentoring)
For more information

- Visit our website: www.reachupandlearn.com
- Send an email: info@reachupandlearn.com
- jamaicahomevisit@gmail.com