Welcome to the Webinar
'Advances in early childhood development'

Early Childhood Matters

Advances in early childhood development

2016

Bernard van Leer FOUNDATION

Welcome to the Webinar
'Advances in early childhood development'

Agenda

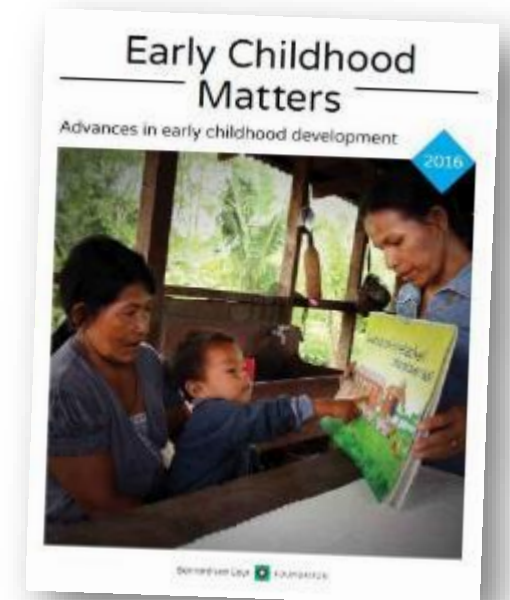|	
Mihaela Ionescu	The Early Childhood Workforce –a powerful force for scaling-up qualityservices for young children
Arjun Upadhyay **Vidya Putcha**	A call for public financing: innovative finance is welcome, but not enough
Tarun Dua **Dana Charles McCoy** **Magdalena Janus** **Maureen M. Black**	Measuring development in children from birth to age 3 at population level

Q&A session

Moderated by Joan Lombardi, Senior Adviser, Bernard van Leer Foundation

Mihaela Ionescu

Programme Director, International Step by Step Association (ISSA), The Netherlands

The Early Childhood Workforce –a powerful force for scaling-up quality services for young children

The initiative is co-hosted by the [International Step by Step Association (ISSA)](#) and [Results for Development (R4D)](#).

Stimulating environments and high-quality pedagogy are fostered by better qualified staff, and better quality pedagogy leads to better learning outcomes.

(Litjens, I., M. Taguma (2010), *Literature overview for the 7th meeting of the OECD Network on Early Childhood Education and Care,* OECD, Paris)

A few challenges:

EARLY CHILDH**oo**D WORKFORCE INITIATIVE

Poorly trained, paid, & supported

Shortage of qualified workers

Limited data about the workforce and evidenced-based approaches

Expansion of services, yet quality & equity concerns persist

Early childhood workers are diverse and difficult to define

Neuman, Josephson & Chua (2015); Bernal & Camacho (2012); CapacityPlus (2013); SABER-ECD.

About the Initiative:

EARLY
CHILDHOOD
WORKFORCE
INITIATIVE

- It's global, but focuses also on the country system and policy level to support and empower those who work with families and children under age 8 and those who supervise and mentor practitioners.

- Takes a holistic, multi-sectoral approach to bridge gaps in policy and practice and promote high quality, equitable services.

- Its main functions: Knowledge Hub and Joint Learning

Online portal

Country studies & global landscape analyses

Joint learning

Thematic areas

EARLY
CHILDHOOD
WORKFORCE
INITIATIVE

1. Competencies & standards

Remuneration, working conditions, recruitment, attractiveness of the profession

Agreed requirements and expectations; different roles within diverse EC services; Individual, team, institutional and system level

4. Recognition of the profession

2. Training & professional development

Continuous feedback and coaching; supportive monitoring for improvement

3. Monitoring and mentoring

Up-to-date training opportunities, evidence based, linked with practice; career pathways with diverse entry points

www.earlychildhoodworkforce.org

**EARLY
CHILDHOOD
WORKFORCE
INITIATIVE**

For more information about the initiative:

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Results for Development Institute, USA

Vidya Putcha Programme Officer

A call for public financing: innovative finance is welcome, but not enough

A call for public financing: innovative finance is welcome, but not enough

Early Childhood Matters Webinar

September 20, 2016

Vidya Putcha and Arjun Upadhyay

RESULTS FOR DEVELOPMENT

- **Roadmap of the presentation**
  - Public spending on pre-primary education
  - Trends in international financing
  - Financing needed to reach SDG Target 4.2
  - Benefits and challenges of leveraging innovative finance
  - Need for public financing
- **Sources for analysis**
  - Background Paper for International Commission on Financing Global Education Opportunity
  - OECD-DAC CRS database
  - Desk review
  - Primary research via country consultants

PUBLIC SPENDING ON PRE-PRIMARY EDUCATION

Financing for early childhood development (ECD) services has been inadequate to ensure access and quality for disadvantaged children who have the most to gain.

- In developing countries, on average, 0.07% of gross national product is spent on pre-primary education compared to 0.5% in developed countries (UNESCO, 2015).

- Asia and Sub-Saharan Africa spend considerably less on pre-primary education compared to other regions.

Public expenditure on pre-primary and primary education as a percentage of GNP by region, 2012

Region	Primary education	Pre-primary education
Sub-Saharan Africa	1.7	0.0
South and West Asia	0.9	0.0
North America and Western Europe	1.5	0.4
Latin America and the Caribbean	1.6	0.2
East Asia	1.4	0.09

% of GNP

■ Primary education ■ Pre-primary education
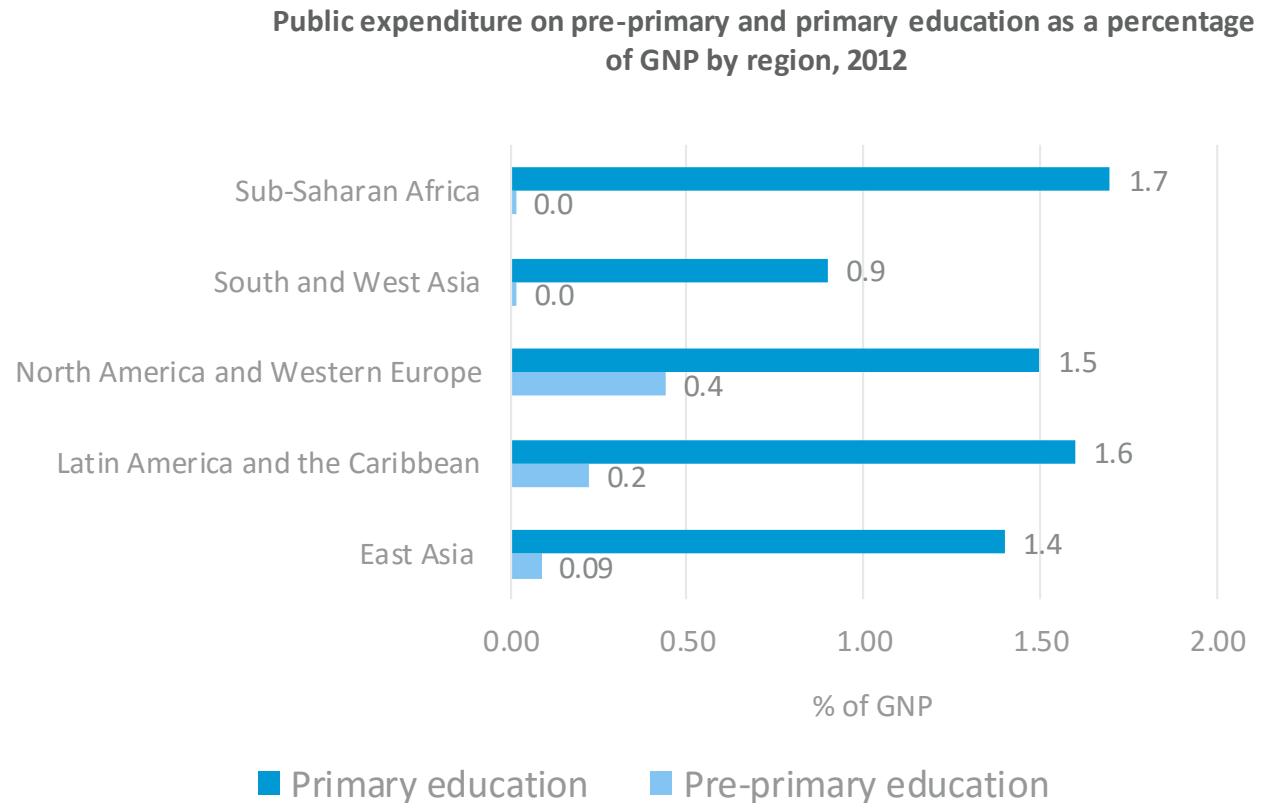
PUBLIC SPENDING ON EARLY CHILDHOOD DEVELOPMENT

In addition to insufficient public financing, households make significant contributions to ECD programs which has severe equity implications.

- For example, across peri-urban areas in Nigeria, Ghana, Kenya, and South Africa, households spend anywhere between 8 to 27% of GDP per capita per month on preschool

Households' monthly preschool related expenditures per child going to preschool

Source: UBS Optimus Foundation. 2014. "Exploring Early Education Programs in Peri-urban Settings in Africa: Final report summary."
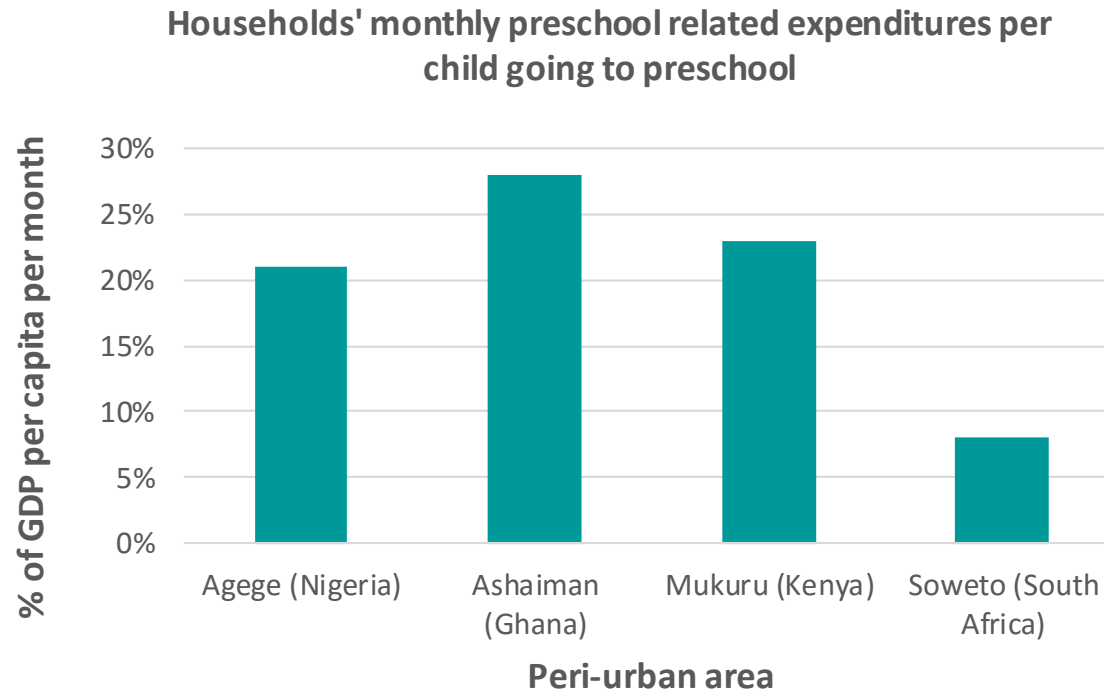
TRENDS IN INTERNATIONAL FINANCING

Estimates suggest that donor investments in early childhood education account for only 2% of aid to basic education.

Aid to Education, Gross Disbursements*
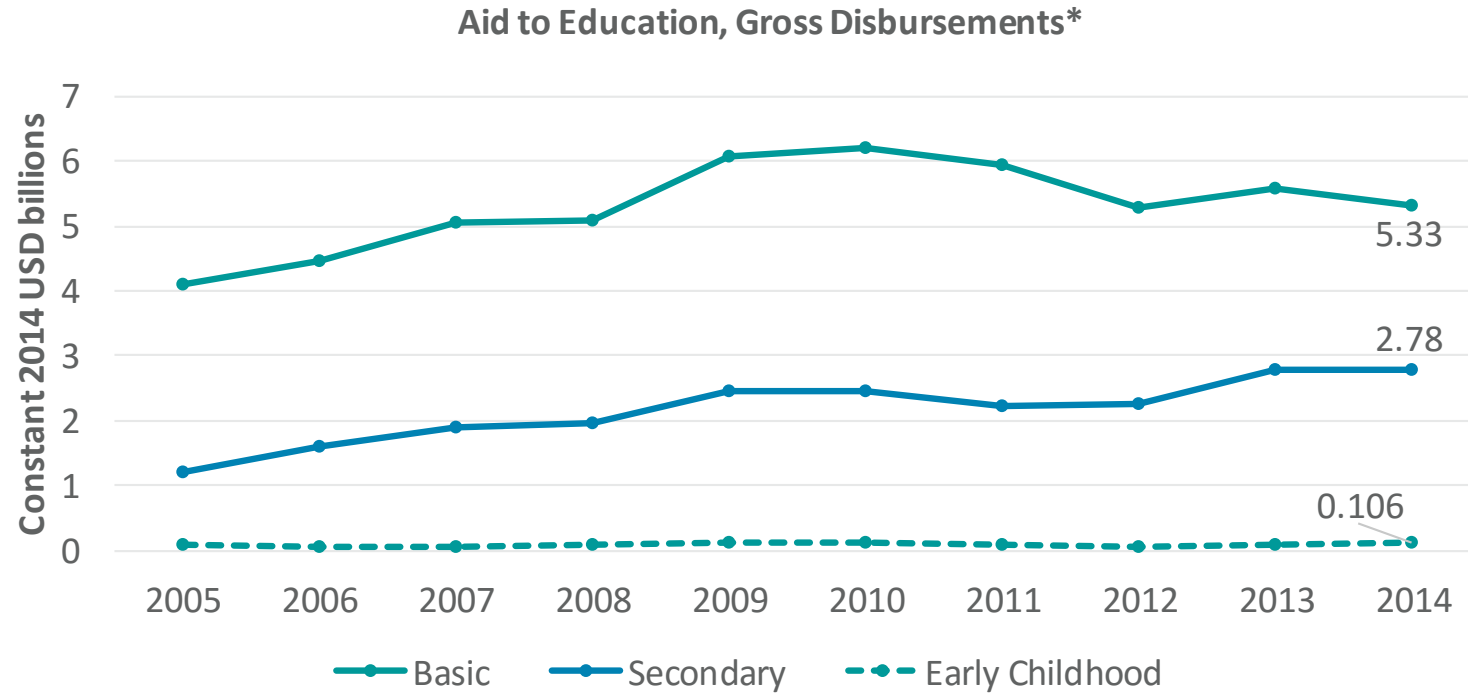
Source: OECD-DAC CRS Database

*Basic education includes early childhood education according to OECD-DAC categorization.

TRENDS IN INTERNATIONAL FINANCING

Top Donors of ECE, Gross Disbursements, 2014*

Pie chart:
- Australia 11%
- Canada 19%
- Korea 11%
- New Zealand 11%
- Belgium 10%
- Germany 10%
- Denmark 8%
- Other 20%
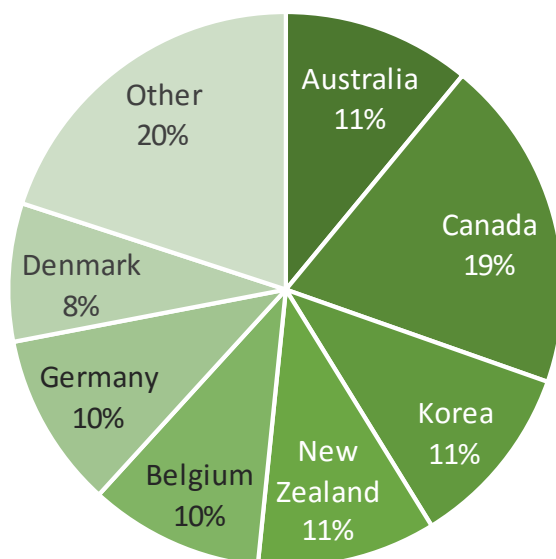
Source: OECD-DAC CRS Database

Top Recipients (by income group) of ECE Aid, Gross Disbursements, 2014
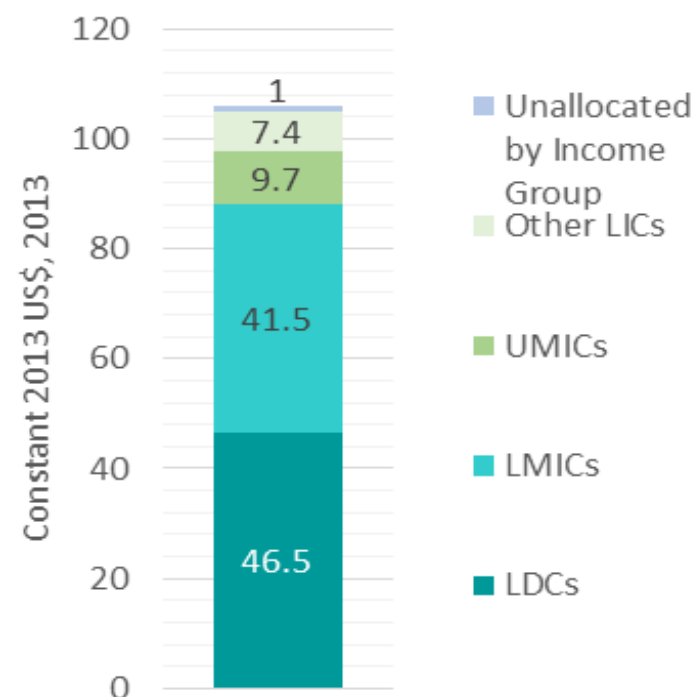
Stacked bar chart, Constant 2013 US$, 2013:
- LDCs: 46.5
- LMICs: 41.5
- UMICs: 9.7
- Other LICs: 7.4
- Unallocated by Income Group: 1

*Basic education includes early childhood education according to OECD-DAC categorization.

FINANCING NEEDED TO REACH TARGET 4.2

Target 4.2: By 2030, ensure that all boys and girls have access to quality early childhood development, care, and pre-primary education so that they are ready for primary education.

- Current financing is woefully inadequate to reach Target 4.2

- Estimates suggest that spending on one year of high quality pre-primary education alone must increase by seven times annually.

Current Spending on Pre-Primary Education vs. Spending Needed to Reach Target 4.2 in low and lower-middle income countries
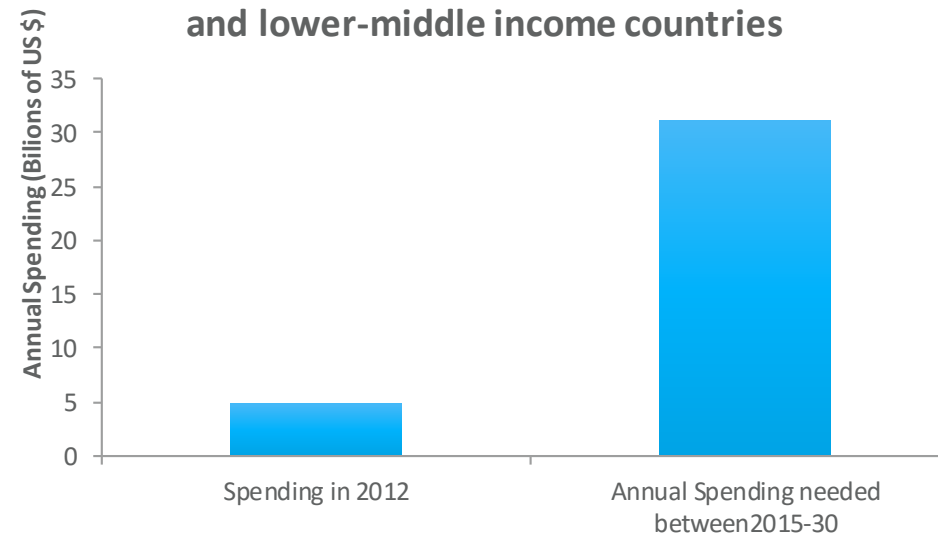
Annual Spending (Bilions of US $)

Spending in 2012	Annual Spending needed between 2015-30

Innovative financing has its benefits and challenges.

Benefits

Challenges

Can require complex policy/legal frameworks

May not be sustainable in long-term or suitable for programs at scale

Jumpstart investments in ECD

Challenges encountered similar to mainstream financing

Promote a focus on outcomes

Relegates ECD to a "special category"

PUBLIC FINANCING IS NEEDED TO SUPPORT ECD

In order to ensure wide access, public financing is needed and countries must innovate to support the most disadvantaged. This aligns with recommendations made by the Education Commission in its recent report.

- **Countries must:**

  - Integrate early childhood services into existing financing for core education, health and nutrition, and protection services.

  - Innovate to support the most disadvantaged children.

Education Commission Recommendations
• Governments should provide fee free education for pre-primary through secondary
• Allocate public funding to the lower levels of the education ladder, and, within that, to those left behind because of poverty, disability, and social disadvantage

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Tarun Dua Medical Officer, Department of Mental Health and Substance Abuse, WHO

Dana Charles McCoy Assistant Professor, Harvard Graduate School of Education, USA

Magdalena Janus Associate Professor, Offord Centre for Child Studies, Department of Psychiatry and Behavioural Neuroscience, McMaster University, Canada

Maureen M. Black Distinguished Fellow, RTI International and Professor, University of Maryland School of Medicine, USA

Measuring development in children from birth to age 3 at population level

Population-based Assessment of Child Development 0-3 years

Tarun Dua
Dana Charles McCoy
Magdalena Janus
Maureen M. Black

![SUSTAINABLE DEVELOPMENT GOALS logo]

- **TARGET4.2**

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

- SDG goals are inter-linked, cover several goal areas and are meant to work together, e.g., Goal 1 (end poverty) Goal 2 (end hunger and improve nutrition), Goal 3 (healthy lives for all), Goal 5 (gender equity), Goal 16 (end violence against children).

- **Indicator 4.2.1**

- – Percent of children developmentally on track

What gets measured, gets done

KEY QUESTIONS

- What does "developmentally on track" mean?

– Culture + context: How to consistently measure?

- How to apply to all countries, all children:

– Few tools available now for high, middle and low-income countries

– Accurate measurement for children with disability

– Birth to age 6: Developmental trajectories

- Three initiatives

✓ The Caregiver Reported Early Development Index (CREDI) – DANA MCCOY

✓ WHO Child Development Indicators Project – MAGDALENA JANUS

✓ Global Child Development Group – MAUREEN BLACK

The Caregiver Reported Early Development Index (CREDI)

Dana Charles McCoy, PhD
Günther Fink, PhD
Harvard University

CREDI AIMS

- To develop a set of **caregiver-reported items** that
  - capture *motor*, *language & cognition*, and *socio-emotional* development for 0-36mo
  - are clear and simple enough to be understood by caregivers and implemented quickly with minimal training
  - are "culturally neutral" for global use
  - are psychometrically valid/reliable, not subject to social desirability bias
- To group these items into
  - A **brief scale** (~20 items) for population-level monitoring
  - A **long scale** (~60 items) for research & evaluation (& screening?)
  - A **supplemental item set** for country-specific use
- To make all scales, supporting documents, and data freely available via **sites.sph.harvard.edu/credi**

FORMAT & ADMINISTRATION

- Items asked to **primary caregiver** using **yes/no scale**
- **Training** takes <1 day
- Section **prompts** included to explain directions & reduce social desirability bias
- Items include **examples** and **images** to improve objectivity and clarity
  - Can the child speak using short sentences of two words that go together (e.g., "Mama go" or "Dada eat")?
  - Can the child pick up a small object (e.g., a small toy or small stone) with just his/her thumb and a finger?
- Total **time**: <5mins (*short form*), 10-15mins (*long form*)
- Final version to include **start/stop rules**, **scoring guide** for full scale and subscales, **item guide** for translation

HISTORY & VALIDATION PROCESS

Evaluation, refinement, communication

1. Creation of conceptual framework (Summer, 2013)
2. Collection of existing tools (Summer, 2013)
3. Selection & development of initial item set (Fall, 2013)
4. Pilot Phase I (18-36mo only; Jan-Oct, 2014)
   - *Rural Tanzania*
5. Pilot Phase II (June, 2015 - Jan, 2016)
   - *Urban Tanzania, Zambia, Brazil, Bangladesh, Laos, United States*
6. Pilot Phase III (March-April, 2016)
   - *Lebanon, Jordan, Pakistan*
7. Pilot Phase IV (June-Sept, 2016)
   - *Brazil, Cambodia, Chile, Colombia, Ghana, Guatemala, Hong Kong, Laos, Philippines, United States*
8. Public dissemination (end 2016)

WHO Child Development Indicators Project
For children 0-3 years of age

Tarun Dua, WHO
Melissa Gladstone, University of Liverpool
Magdalena Janus, McMaster University
Patricia Kariger, University of California Berkeley
Gillian Lancaster & Gareth McCray, University of Lancaster
& a Group of Collaborators and Experts

World Health Organization

Background

- WHO urgency to measure past survival, limited availability of culturally validated measures
- Two complementary initiatives to monitor child development and learning on a population-level: for children 0-3 led by WHO; and for children 3-7 by UNESCO and UNICEF

***Goal of WHO Child Development Indicators Project:***

Using a combination of conceptual and empirical approaches, **identify, field test and recommend a set of indicators to reliably assess child development at population-level across the 0-3 age group** valid worldwide and practical for use in household surveys/progamme evaluations.

Methods

- LMIC data on 0-3 development - 7 instruments, 10 countries, 14 databases (N=23,635)

- Item matching, statistical analyses of distribution of 542 item clusters considering: age discrimination, item reliability & validity, ease of use/feasibility, importance

- Prototype: 120 items in 5 domains:
  - Fine Motor (23),
  - Gross Motor (23),
  - Receptive language (20),
  - Expressive (24),
  - Socio-emotional (30)
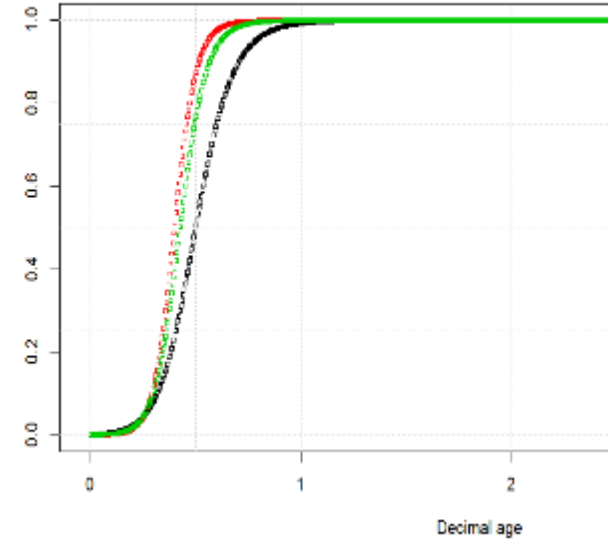
Universal, discriminates well
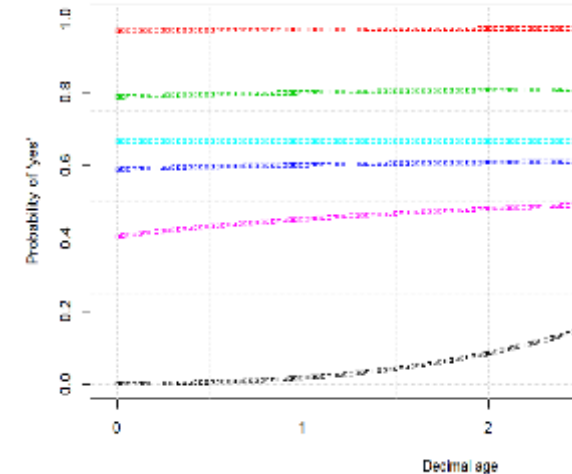
Non-universal, doesn't discriminate

Testing the Instrument

- Detailed protocol for adaptation, testing and tablet data collection; integration of visuals

- Phase I (feasibility and adaptation): Pre-pilot in Brazil, Malawi, Pakistan – focus groups, contextual data, anthropometry, caregiver and direct assessment

- Phase II (pilot testing). Pilot in 3 countries – caregiver only, representative sample, cognitive testing, reliability, contextual data
- Phase III (field testing). Large-scale multi-country study with representative samples to create norms (*planning stages*)

Advances in Early Child Development

Maureen Black, PhD

Funding:

  Bill & Melinda Gates Foundation

  RTI International

Global Child Development Group:

 Sue Walker

 Stef van Buuren

 Sally Grantham-McGregor

 Ann Weber

 Orazio Attanasio

 Hedwig Hoffstetter

 **Other Advisory Board members**

Participating Colleagues

Aim

- To develop population-based method of monitoring early child development across ages & countries using existing data

- Data from over 16,000 children representing 15 cohorts from 11 countries.
  - Initial data < age 3
  - Longitudinal data > age 5

D-score (Development score)

D-score: numerical unit with quantitative comparisons within and between ages and countries (similar to height-for-age z-score used to define stunting).

D-score

Blue: Region A
Red: Region B

Age in months
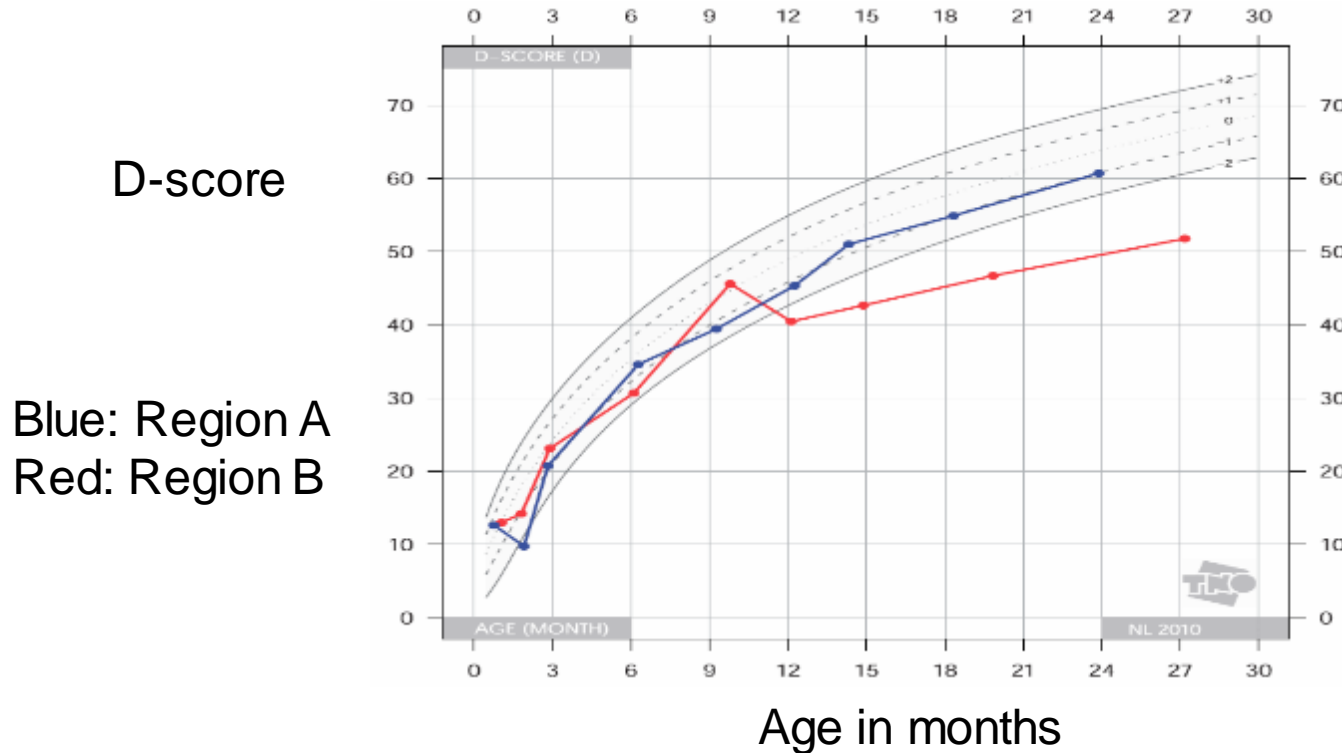
Source: S. Van Buuren (2014) Growth charts of human development. *Statistical Methods in Medical Research*

Goal: 2 population-level instruments

Monitoring & Evaluation

- Global development score
- Few items (10-15 per child)
- Less time (< 10 min)
- Less training

Program Impact Evaluations

- Global and domain-specific
- More items (10-15 per domain per child)
- More time (< 30 min)
- More training
- Goal: direct assessment

For both
- Open access with no licensing fees
- Materials (if necessary) at cost (no profit)
- Training, quality assurance guidelines downloadable
- Predictive of later school-related outcomes

Process

- **Harmonize data** from multiple countries

- Fit Rasch model and identify items for a **composite scale**

- Estimate D-scores and **distribution of D-scores** within and across the cohorts.

- Test **predictive validity of D-scores** in several cohorts

- **Construct age-conditional reference charts of typical development** using South African birth cohort

- Establish process to select set of developmental indicators for **"off track"** development

Future Directions

- Complementary efforts with points of consensus
  - Conceptual framework
  - Emphasis on psychometric properties
  - Evidence on usability

- Need for active collaboration as the results become available after testing

- Collaboration with other stakeholders

Q&A session

Moderator	Joan Lombardi
Mihaela Ionescu	The Early Childhood Workforce –a powerful force for scaling-up qualityservices for young children
Arjun Upadhyay Vidya Putcha	A call for public financing: innovative finance is welcome, but not enough
Tarun Dua Dana Charles McCoy Magdalena Janus Maureen M. Black	Measuring development in children from birth to age 3 at population level

Thank you for attending!

The recording of this webinar will be shared via
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