Young children and the polycrisis

Where to from here?









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Young children and the polycrisis Where to from here?

A Landscape report by Mark Tomlinson and Rachael Glaser



Foreword

As our world navigates an era marked by extraordinary complexity, the very youngest among us—our children—find themselves at the crossroads of multiple, intersecting crises. From climate change and widespread conflict to economic inequalities and public health emergencies, this "polycrisis" is not an abstract threat; it is a lived reality shaping daily life, safety, and opportunity for millions of children around the globe. With an additional 100 million children now living in poverty and 180 million experiencing disrupted early education, the urgency for reimagined solutions that reach every child has never been greater.

It is with both a sense of urgency, hope and optimism that we introduce this report commissioned by Grand Challenges Canada and the Early Childhood Development Action Network. The purpose of this work is to illuminate the interwoven challenges children face today, while also honoring the resilience and potential they possess to help drive positive change for a better future.

This foreword is written not only as an endorsement of the report's meticulous research and thoughtful analysis conducted by Mark Tomlinson and Rachel Glaser, but as a testament to the remarkable efforts of all those who contributed. Their dedication ensures that the plight and promise of children in the context of today's polycrisis are neither ignored nor misunderstood, and their recommendations chart a bold path forward through systems transformation that center innovative and equitable approaches at scale.

I urge every reader—policy maker, investor, advocate, educator, or concerned citizen—to explore the findings within. The adaptive strategies and policy recommendations offered are essential tools for forging a more secure and just future for children everywhere. As you engage with this report, may it strengthen your resolve to champion the rights, protection, and well-being of every child, everywhere to reach their full potential.

Let this document serve as a catalyst: not only for heightened awareness, but for meaningful action. The challenges are immense, but so too is our capacity for collective impact. The future of children—indeed, the future of us all—demands nothing less.

Michelle Cruickshank

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The Early Childhood Development Action Network

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Glossary

Caregiver

A person who is very closely attached to the child and responsible for their daily care and support. Primary caregivers include parents, families, and other people who are directly responsible for the child at home. They also include carers outside the home, such as people working in organized day care

Developmental delay

A description used when a young child's development is delayed in one or more areas, compared with other children. This can include the development of gross-motor skills, finemotor skills, speech and language, cognitive and intellectual skills, and social and emotional skills, as well as executive functions.

Disability

Any difficulty encountered in three interconnected areas: impairments in body functions or alterations in body structure; limitations or difficulties in executing activities; and restrictions in participating in any area of life. Disability arises from the interaction of health conditions with contextual factors, including environmental and personal factors.

Early child development (ECD)

Children's cognitive, physical, language, motor, and social and emotional development, between conception and age 8.

Nurturing care

Characterized by a caregiving environment that is sensitive to children's health and nutritional needs, responsive, emotionally supportive, and developmentally stimulating and appropriate, with opportunities for play and exploration, and protection from adversities.

Responsive caregiving

Incorporates anticipatory guidance for safety, education, development, and the establishment of a caring and understanding relationship with one's child. Parenting is not limited to biological parents, but extends to guardians or caregivers providing consistent care for the child.



Executive summary

The quarter of a century from 1990 to 2015 saw remarkable and unprecedented gains in maternal and child health. Progress was however uneven, with the poorest countries in sub- Saharan Africa and Southern Asia not making sufficient progress. The year 2015 saw the publication of two landmark publications relevant to the field of early childhood development (ECD). The Global Strategy for Women's, Children's, and Adolescents' Health outlined a three point agenda - "Survive; Thrive and Transform". For the first time in a global document the notion of 'thriving' was explicitly acknowledged. Perhaps even more importantly, the 17 Sustainable Development Goals were adopted by all United Nation Member States in the same year. The SDGs include a number of relevant goals for improving ECD and early childhood education. The years since 2015 have seen consistent progress towards improving ECD. The objective of this report, Commissioned by Grand Challenges Canada (GCC) was to inform the strategy of GCC, and the strategy refresh of the Eary Child Development Action Network (ECDAN). The focus was on assessing the impact of COVID-19 and current crises on young children globally, to chart the progress made in improving ECD and to describe the potential future challenges and solutions.

State of children globally

Following substantial improvements in a wide range of child development and health indicators prior to 2020, children in recent years have experienced a series of economic, geopolitical, and environmental shocks that have negatively impacted on their development, well-being, and future prospects. This combination of events, the COVID-19 pandemic, extreme weather events and global instability precipitated by war and conflict, high energy prices and inflation, have combined to stall, and even reverse progress. This has been termed a 'polycrisis' (perhaps even 'the polycrisis)- an interconnected web of near simultaneous adversities manifesting interdependently in globalised world.² Through complex and interrelated pathways, these shocks have impacted children's nurturing relationships, health and well-being, social environments and their access to education.

The COVID-19 pandemic and associated aftershocks precipitated a substantial growth in global poverty³ – increasing poverty by 10%, which affected over 100 million more children. Many poorer economies are mired by debt and development gains are backtracking with increases in malnutrition and stunting⁴. Routine vaccination has dropped with implications for mortality, resilience of families and economic growth.⁵

COVID-19 has impacted on maternal mental health and parental practices,⁶ affecting mental health and parenting practises vital for caregiver child attachment. At the height of national lockdowns, over 180 million children globally had their preprimary schooling disrupted,⁷ while one estimate of lost life learnings due to COVID-19 lockdowns was US\$21 trillion.⁸

Climate breakdown has catastrophic impacts on child mental health through multiple stressors including displacement, loss, and increased water and food insecurity, ⁹ ¹⁰ and it is estimated that the combination of environmental crises and political instability will result in 2.3 billion people living in conflict settings or fragile countries by 2030. ¹¹

Estimates suggest that the need for humanitarian assistance has doubled in the last five years, with half of all people in humanitarian need (90. 3 million) under the age of 18. And while institutional and private humanitarian funding increased by 27% in 2022 humanitarian aid agencies are facing unprecedented financing challenges.¹²

Children with disabilities are among the most disadvantaged groups globally, with limited access to services, with families are more likely to live in poverty, which further amplifies their marginalisation.¹³

Scoping of literature

We conducted a brief narrative review,¹⁴ searching four online databases: PubMed, EBSCOHost, the Cochrane Database of Systematic Reviews and the Campbell Collaboration. The search was confined to post 2015 due to time and resources constraints, and given that Jeong and colleagues had conducted a comprehensive systematic review for the World

Health Organizations 'Improving Early Childhood Development Guideline'. 15

The key takeaway from the review was that evidence-based ECD programs that strengthen nurturing care, promote early stimulation, and target caregiving behaviour and learning opportunities have been comprehensively shown to be effective. However, there are gaps in our understanding of how these interventions actually work, as content and delivery strategies vary substantially. Interventions often include a multitude of elements (parenting skills, relaxation, modelling, positive attention, nutrition) with little clarity on which components are in fact contributing to outcomes.

There is increasingly a move away from purely testing effectiveness to a focus on identifying the necessary and sufficient components for effective early interventions. ¹⁸ In this approach key intervention components (common elements), are matched to circumstances (of the child, context or level of facilitator expertise) to improve outcomes. ¹⁹ ²⁰

Stakeholder interviews

Between June and September 2023, we interviewed a total of 17 stakeholders. They ranged from leading academics/researchers in the field and UN agency representatives to experts in financing and health policy. For a comprehensive discussion of findings including quotes see final report. Here we provide a summary of key learnings and takeaways for the field.

- a. Climate breakdown: Across respondents, climate breakdown was seen as the singular threat for the future of vulnerable children. As is the case in all crises, children are affected the most, and poor children even more. We have only just begun to understand the full implications of climate breakdown on children.
- b. Framing and definition: The framing of ECD was viewed as problematic (even incoherent), presenting a barrier to policy and investment. The term 'ECD' is used as 'shorthand' for a developmental process, a developmental outcome, and even for a place (preschool).

- Participants stated that coherent framing of ECD is essential for intervention development as well as for appropriate financing. Linked to this, one respondent argued that the attempt to identify critical periods for intervention inadvertently contributes to a fragmented view of human development when in fact it should be situated within a life-course perspective. Concern was also expressed that often the child was being viewed as an isolated focus of intervention, separate from family context, leading to policies and interventions that do not prioritise the family as an enabling environment.
- c. The trajectory of the ECD Field: There was wide agreement among respondents that the global ECD field has expanded exponentially in the last few decades, with a proliferation of research, policies and programs. Several respondents noted the important role that neuroscience and science more generally, has played as an advocacy tool to catalyse support for improving ECD. Preschool interventions were described as having made significant progress, while domains such as parenting, childcare, child protection, and disability support were lagging in terms of development and practice.
- d. Response to the polycrisis: There was agreement that COVID-19 and the corresponding economic downturn has led to substantial learning setbacks in the health, development and learning opportunities for children, offsetting many of the improvements that had been achieved in previous years. There was concern that the polycrisis is diverting attention away from early childhood, and that the emphasis for many actors has reverted to 'survival' rather than the commitment to 'thriving'. Additionally, it was argued that the focus on human capital formation tended to privilege long term outcomes. And while this of course essential, there was a moral case to be made for the value of acting now for the sake of children irrespective of long-term impact.
- e. Multilateralism: A number of respondents pointed to the important role multilateral organizations have played in framing and

building global governance for improving ECD. The Nurturing Care Framework (NCF) brought the right actors together, enabling the expression of a unified goal to improve the lives of children globally. Respondents referred to the central role that the World Health Organization (WHO) has played in consensus building, the development of guidelines, sponsoring research, and setting up working groups to guide implementation. The creation of the Early Childhood Action Network (ECDAN) and its associated regional networks was also noted as a major success. But there was also wide agreement among respondents that the strength of multilateralism has declined recently.

- f. Intersectoral collaboration: At a national level, there has been a growing adoption of responsibility by ministries of health and education for improving ECD which has led to the drafting of relevant legislation and corresponding budget allocations. The key role of strong political leadership at a national level was highlighted by a number of respondents.
- g. Integration of nurturing care into primary care: Integrating interventions to improve ECD into the primary care system is somewhat of a 'holy grail' in the ECD field. The last 5- 10 years has seen a number of large research initiatives testing integration. The recent publication of the negative findings of the SPRING Trial²¹ and the Siyaya District Integration Trial,²² respondents expressed concern that these might be interpreted to mean that integration is simply not possible.
- h. Culture and the use of evidence: Criticism was also levelled at the prevailing framing of ECD, which was described as being too deeply embedded in Western values. For instance, the prominent Western focus on developing 'human capital' may contrast with values such as social responsibility (rather than human capital formation). There does however appear to be a rising consensus that cultural grounding should be considered at every stage of program and policy development. There has been recent criticism²³ of how the concept of responsive

- caregiving may be a predominantly Western construct, and of the way in which evidence from HICs is frequently applied uncritically to LMICs. This was reflected in the interviews of several respondents. One respondent cited the example of the Heckman model which is widely cited to advocate for early intervention. In fact, the Heckman model uses the costs of the US prison and health care systems as its outcomes. Given that the United States has the most expensive health and prison system in the world, the utility of the model is in fact limited.
- i. Evidence and scale: A number of respondents acknowledged the importance of RCT's in providing evidence and in establishing causality. But they also noted the problem of assuming evidence, from what they described as the 'petri dish of an RCT', was credible and always generalisable. In addition, the widespread practice of assuming that interventions that have been shown to be effective in tightly controlled RCTs will immediately be successful when implemented within a health system, was challenged by a number of respondents. One respondent likened this to "putting flour in an oven and expecting a cake".
- j. Scaling up: A common theme for many of the respondents was a despondency about what happens when attempts are made to take effective interventions to scale. One respondent went so far as to say that "scaling interventions is an oxymoron", and that if you are interested in real scale (national scale) then single interventions simply do not scale.
- k. Humanitarian settings and migration: There was agreement amongst respondents that there is currently no delivery system to buffer people from the effects of environmental disruption and conflict other than 'ad hoc' mechanisms. Refugee situations often extend for several years, affecting an entire childhood. What is needed, is the development of models for both acute and prolonged crises including components of education, health, nutrition, shelter and thriving that apply to all children.

- Child protection: Child protection was seen as a particularly weak issue politically, with states rarely taking initiative on this issue. Nationally, the budgets for child protection were described as 'tiny'. One respondent stated that children requiring protection are the least empowered politically, marginalised and for the most part 'invisible'. They noted that globally, the child protection sector is reportedly embroiled in policy conflict regarding deinstitutionalisation and other 'relatively minor disputes' which negatively impacts united political action.
- m. Childcare: Childcare is a relatively new area of focus driven by global increases in maternal employment. According to some respondents, international organizations and researchers currently know little about the characteristics of childcare globally and how its quality can be improved. Childcare centres usually operate in the informal sector, with services provided by family and community members. One argument was that for childcare to be prioritized, it is essential that it is reframed within the context of women in the economy and gender transformation.
- n. Disability: Disability and ECD remains a neglected area. The NCF was criticized for not fully accounting for the emotional challenges faced by parents of children with disabilities, and the framework's apparent lack of alignment with the Sustainable Development Goal 4.2 promoting school readiness toward inclusive education for children aged <5 years with or at risk for developmental disabilities.
- o. Short-termism and long-termism: One respondent described feeling confused about why funders in the field of child development persisted in funding short term projects, when they appeared to understand the 'unfolding' nature of development across the life-course. NGO's and CBO's are likely to receive funding for a year or 18 months or three years if they are lucky. When asked about some of the reasons behind the short-term nature of so much of

- the funding, one respondent stated that was linked to the political economy of the donor community.
- p. Financing: The COVID-19 pandemic was widely described as a key factor in the de-prioritization of financing (globally and nationally) to improve ECD. Concern was expressed that with the new priorities, children will be 'squeezed out' of the agenda. In addition, the fragmented approach to improving ECD has resulted in limited appetite for financing intersectorally. Thirdly, there is also a reported 'short-termism'- the need to demonstrate quick tangible results to constituencies (such as Boards). While highincome countries are making the shift from more backloaded funding profiles to balanced profiles, in LMICS the emphasis is on secondary school and higher education. A relatively new development in ECD finance is childlens investing which is aimed at Impact and Environmental, Social and Governance (ESG) investors.
- q. Measurement: Respondents viewed investment in appropriate indicators and standardized measurements for both implementation and outcomes as a necessary component of national systems integration and transformation. The Global Scales for Early Development (GSED) were seen as a significant advance in providing a standardized method for measuring the development of children at the population level.
- r. From system adoption to system transformation: Respondents perceived fragmentation of ECD interventions, with many being trialled over short periods, creating a barrier to the cumulate learning necessary to improve outcomes. Some stated that the quest for 'innovation' associated with RCTs and pilot studies should be replaced by the contextual adaption and slow change that characterizes 'systems transformation'.

Conclusion and recommendations

There has been significant progress in improving ECD. But current approaches remain siloed and vertical, with children compartmentalized into the neonate, the toddler, the 'middle child', and the adolescent. We urgently require a holistic focus on the whole child as they navigate the life-course, and an approach to policy making, financing and humanitarian response that puts children firmly at the centre. What is needed is 'out of the box' thinking, for thinking across the life-course and for systems transformation and a revolution in our thinking about how to assist children to emerge from the polycrisis. Key recommendations from this report are as follows:

- Urgent and ongoing action is needed on climate breakdown: Climate breakdown is a singular threat to children, and urgent and comprehensive action needs to be taken to mitigate the impact on children. This should include research on the unique vulnerability of young children; and to interventions and systemic change to improve resilience of children, families and communities.
- Focus on the most vulnerable children:
 Children in humanitarian settings, children
 in conflicts, and children with disabilities are
 amongst the most vulnerable groups within the
 vulnerable. Global action and financing must
 address this as a matter of urgency.
- Global action is needed to improve child protection: The child protection sector is massively neglected and in crisis. In all countries, but particularly in LMICs the 'invisibility' of the most vulnerable must be addressed. The only way this will be achieved will be through a radical transformation in how social protection systems are funded and organized globally.
- System transformation is urgently required:
 We recommend learning partnerships across
 sectors and disciplines to avoid fragmentation,
 and a long-term view of what is required for
 system change to take place.

• A new approach to financing is needed:

Despite significant advocacy success for improving ECD, adequate financing has not followed. Innovative, sustainable financing models (such as financing for system transformation; and child lens investing) must be explored incorporating a long-term component. Because funding for young children is 'too little, too late' these new models must prioritise the youngest children.

- Concerted efforts must be made to re-frame the language: The framing of what ECD is and is not must be addressed head on as the current problematic reframing is impacting on funding, prioritisation and new policy.
- Focus on child-care and the informal economy: Addressing the issue of childcare is crucial. Using a gender lens is key as it will have other multiplicative impacts, such as on household income.
- A new approach to scaling is essential:

 'Scaling interventions' has not been successful.

 New small-scale 'branded interventions' are

 not needed (we have the evidence for these).

 Isolating "active" ingredients of interventions

 could help reduce overlap across a saturated
 programming field and build consensus about
 what works. What is now needed is high quality,
 robust evidence to determine effectiveness of
 programs in the real-world using implementation
- Adopt a life-course approach: Attempts should be made to stop children being seen as a 'part-child' (neonate, toddler, young adolescent etc.), and rather as whole child developing across the life-course. International agencies need to stop siloing children, while philanthropies and donors need to leverage the science and evidence to convince their boards that long term investing is essential.

science.

• **Embrace new technology:** Digital technologies are currently underused and offer important avenues (albeit not magic bullets) for improving ECD at scale.



Introduction

Children bearing the brunt of a world in crisis

Children are a kind of indicator species...If we can build a successful city for children, we will have a successful city for all people." – Enrique Peñalosa; Former mayor of Bogotá, Colombia

In September 2015, the body of 5-year-old Syrian boy Alan Kurdi was found on a beach in Türkiye's Aegean region. He had drowned as his family was making the treacherous journey across Türkiye, hoping to reach Europe and eventually Canada. The image of a young child in his red t-shirt and blue shorts lying face down on a beach as the waves lapped at his face must rank as one of the starkest images we have of the crisis in which countless children find themselves today. It is estimated exact figures are impossible – that there are currently 40, 000 children crossing the Darién Gap (a 100kilometre wide wilderness separating Colombia and Panama). The Darién region consists of dense rain forest, steep mountains, and vast swamps where migrants face the threat of kidnapping, child trafficking, unsafe drinking water, lethal snakes, a high risk of drowning, and a plethora of other risks.

We have also begun to emerge from the most proximal effects of the COVID-19 pandemic. Many commentators have lamented the way children were treated during its height. To the best of our knowledge, not a single national authority or advisory board set up during the pandemic included youth representation. Sweden was the only country in the world that did not close schools during the pandemic - presumably having at least considered a cost-benefit calculation in their decision-making of the impacts of doing so on children. For most countries, no such calculation happened to determine the impacts of school closures on the mental health, education, and later life chances of hundreds of millions of children. Children were, in the words of Vikram Patel, simply thrown under the train.24

In 2024, post a 3-year pandemic and in a world facing a climate-induced tipping point, do we continue with business as usual? Continue burning fossil fuel? Continue to destroy the earth's biodiversity? Or do we begin to write an alternative narrative, where the best interests of children and adolescents form the basis of all policymaking. Might we be able to make belonging, mattering, social connectedness, gratitude, kindness, and hope the values we espouse and live by?

This report was commissioned by Grand Challenges Canada. Its overarching goal is to produce a landscape analysis of the global early childhood development (ECD) sector to inform Grand Challenges Canada's forward- facing strategy on investments in early childhood and the Early Childhood Development Action Network (ECDAN) strategy refresh. This included the following activities:

- Establish the status of childhood post COVID-19 and during emerging critical challenges.
- Review of post-COVID19 strategies of key ECD stakeholders: WHO, UNICEF, and funders.
- Review of key global declarations, guidelines, and other normative documents.
- Review of progress towards reaching Sustainable Development Goals (SDGs) related to early childhood development.
- Review emerging risks and blind spots for stakeholders to consider.

Examine emerging evidence, science, government investments in young children to determine how shifts and pivots being made or suggested.

- Review lessons learned from evaluations of programs on the scaling trajectory.
- Review the barriers faced in scaling and sustaining comprehensive early childhood service delivery.
- Explore opportunities for further investment and engagement for national and international stakeholders.

Background and progress

The quarter of a century from 1990 to 2015 saw some of the most remarkable and unprecedented gains in child and global public health. During that time the neonatal mortality rate and the under-five mortality rate were halved, which resulted in close to 50 million more children reaching their fifth birthday in the years from 2000-2015. Much of this success was ascribed to consistent government support for the Millennium Development Goals (MDGs). However, progress was uneven, with the poorest countries in sub-Saharan Africa and southern Asia, where the majority of the world's poorest people live, failing to meet many of the SDGs.

The year 2015 saw the publication of two landmark publications. Both documents were hugely important for the field of early childhood development. The Global Strategy for Women's, Children's, and Adolescents' Health developed by the UN proposed a three point agenda - the "Survive" (end preventable deaths), "Thrive" (ensure health and well-being), and "Transform" (expand enabling environments) agenda.26 For the first time in a global Document, the notion of 'thriving' (not just surviving) was explicitly acknowledged. Perhaps even more importantly, the 17 Sustainable Development Goals were adopted by all United Nation Member States in the same year. In contrast to the MDGs, the SDGs included a number of relevant goals for early child development and early childhood education. Goal 4/Target 4.2 (Ensuring quality inclusive and equitable education and promoting lifelong learning opportunities for all) states that by 2030 all children should have access to quality early education programs (prior to the start of formal education). Target 4.2 has two indicators²⁷: 1) The proportion of children under the age of 5 who are developing as expected for their age in terms of health, learning, and psychosocial well-being; and 2) the percentage of children attending early childhood education programs in the year before formal education.

The years since 2015 have seen consistent progress towards improving early child development, especially in terms of science, advocacy, and political prioritization and funding. In 2016 the third Lancet Series Advancing Early Childhood Development: From Science to Scale made the case for the incontrovertible importance of the early years for child (and country) development. That series also proposed the concept of Nurturing Care and corralled all the best available evidence to advocate for a move from 'science to scale' (see Figure 1). This provided the impetus for the publication of the Nurturing Care Framework and the Country Profiles for Early Childhood Development (part of Countdown 2023). Following this, the Global Scales for Early Childhood Development (GSED) were launched in 2023 – a major milestone in the measurement of child progress.

In 2020, the World Health Organization published a Guideline on Improving Early Childhood Development which, for the first time, provided governments with evidence- based guidelines for their own implementation of programs and systems to improve the position of children in their countries. In 2022, the World Bank published Quality Early Learning: Nurturing Children's Potential which provides evidence-based, cost-effective strategies for delivering quality early childhood education (ECE) at scale. Other key milestones included

UNESCO's Global Partnership Strategy for Early Childhood, the Tashkent Declaration, and the launch of the Global Scales for Early Development (GSED) (see later for more in-depth discussion of these documents). Finally, late 2023 saw the publication of the WHO/UNICEF Global Report on Children with Developmental Disabilities.

2015 2016 2018 2020 2022 ECDAN THE LANCET THE GLOBAL STRATEGY FOR WOMEN'S, CHILDREN'S AND ADOLESCENTS' HEALTH (2016-2030) G20 Initiative for Early Childhood Developm NURTURING CARE HANDBOOK 2019 2015 2018 2021 2023 TARGET THRIVE NURTURING CARE NURTURING CARE Country profiles Technical report

Figure 1: Global milestones in improving early childhood development

Table 1: Declarations and Conventions

| Name of Declaration | Year | Purpose | Domains addressed | Stage of childhood |
|--|------|--|---|--------------------|
| Convention on the Rights of the Child (UN) | 1989 | An agreement by countries to protect children's rights | Children's rights, responsibilities of governments | All |
| Sustainable Development Goal (SDG) 1 – No Poverty | 2015 | To reduce poverty | Proportion of the population living below the international poverty line by sex, age, employment status, and location | All |
| SDG 2 – Zero Hunger | 2015 | To reduce hunger | Prevalence of malnutrition (indicator) | Under 5 years |

| Name of Declaration | Year | Purpose | Domains addressed | Stage of childhood |
|---|-------------------|--|--|---|
| SDG 3 – Good Health and Wellbeing | 2015 | To promote good health and well-being | Maternal mortality ratio; under-five mortality rate; neonatal mortality rate; adolescent birth rate (indicators) | Birth to adolescence |
| SDG 4 – Quality Education | 2015 | To ensure quality education | Reading and mathematics proficiency; the proportion of schools offering basic services | Primary to upper secondary education |
| SDG 5 – Gender Equality | 2015 | To end discrimination and violence against women and girls | Trafficking; sexual exploitation; harmful practices; policies and legislation | All |
| Nurturing Care Framework (WHO) | 2018 | It provides national governments with a framework for strategic action to strengthen public policies, programs, and services that support nurturing care for infants and young children | The framework focuses on five interrelated and indivisible components for optimal early childhood development: good health, adequate nutrition, safety and security, responsive caregiving, and opportunities for early learning | From pregnancy to age 3 |
| G20 Education Ministers' Declaration | 2021 | To put education at the centre of the political agenda as part of the recovery from the present global crisis and to build back better and with resilience for the future | Access and quality of education; education as a human right; educational poverty; blended teaching and learning | School age and higher education |
| Tashkent Declaration on Early Childhood Care and Education (ECCE) | 2022 | To provide guiding principles and strategies for the transformation of ECCE | Equity; ECCE personnel; innovation; policy, governance and finance | 0 to 8 |
| Global Partnership Strategy for Early Childhood | 2020 - 2030 | To reduce the negative trend of underinvestment in ECD due to the COVID-19 pandemic and to overcome the reduction in services for health, nutrition, sanitation, and child protection in all world regions | Evidence for action and rights; data, monitoring and evaluation for accountability; scaling up access, inclusion, equity and quality; strengthened policy, governance, financing and advocacy; international and national coordination and cooperation | 24 months to pre-primary |

It appears incontrovertible that in the last decade there has been considerable and sustained interest and progress in the field of early childhood development.

KEY TAKEAWAYS

- The science is clear that the early years are foundational in terms of child and adolescent development across the life-course.
- There has been global buy-in to the importance of improving early child development and ensuring that children thrive.
- A range of guidelines, guidance documents and declarations now exist that will be key to ensuring that improving early childhood development remains a key global priority.





The polycrisis

In recent years, children worldwide have experienced a series of economic, geopolitical, and environmental shocks that have impacted on their development, well-being, and future prospects. This combination of events- the COVID-19 pandemic, extreme weather events, global instability precipitated by war and conflict, high energy prices, and inflation - has been termed a 'polycrisis': an interconnected web of near simultaneous adversities manifesting interdependently in a globalized world.²⁸ In fact, it has been argued that we are not in 'a polycrisis' but 'the polycrisis' where we have an unprecedented convergence of ecological, political, and economic strife.²⁹ Through complex and interrelated pathways, these shocks have impacted children's nurturing relationships, health and wellbeing, social environments and access to education. For a large percentage of the world's children, the polycrisis has magnified pre-existing hardship and vulnerability, and increased inequality between and within countries. This chapter provides a situational overview of childhood globally, outlining the impact that the polycrisis has had on children, policy developments and financing for early childhood development. While COVID-19 is discussed in depth, it is also treated as only one of many adversities. Many of these adversities existed prior to the pandemic.

COVID-19

During the pandemic, while children had the lowest risk of the direct effects of the SARS-CoV-2 virus and COVID-19 disease, they had the highest risk (across age groups) of experiencing the indirect adverse effects. Many children lost grandparents as well as primary caregivers; newborns were separated from their caregivers; and children experienced the negative effects of fear and panic, anxiety and depression, and altered family relationships. ³¹

The extent to which families are able to provide nurturing care for their children depends on enabling environments, which include adequate housing, quality health care, social security, and supportive laws. 32 When this enabling environment is disrupted, as happened during lockdowns, the implications for children are huge. School closures impacted on play, and the time-sensitive development of peer relationships, while parental loss of income as a result of job losses directly impacted the food security and health of children in particular. Infants and young children are very sensitive to perturbations in their early interactions with their primary caregiver. During the pandemic, the capacity of many caregivers to engage with their children in responsive interactions and to protect them was battered by their own anxieties and mental health difficulties.33

COVID-19 led to the immediate shutdown of economies, widescale job losses and the collapse of businesses, with children from families with little financial cushioning being affected the most. Prior to the pandemic, there had been a global downward trend in child poverty since the early 2000,³⁴ although around 1 billion children worldwide, and half of all children in developing countries still suffered at least one severe deprivation, without minimum levels of access to education, health, housing, nutrition, sanitation, or water. Many children were experiencing multidimensional poverty, impacting substantially on their well-being and development.

COVID-19 precipitated a substantial growth in global poverty.³⁵ Between 2019 and 2021, there was a 10% increase in childhood poverty globally, affecting 100 million more children (see Figure 2). In 2022, 25% of children were living below national poverty lines and there was an increase in extreme poverty.³⁶ UNICEF predicts that, in the best-case scenario, it will take seven to eight years to recover and return to pre-COVID-19 child poverty levels.³⁷

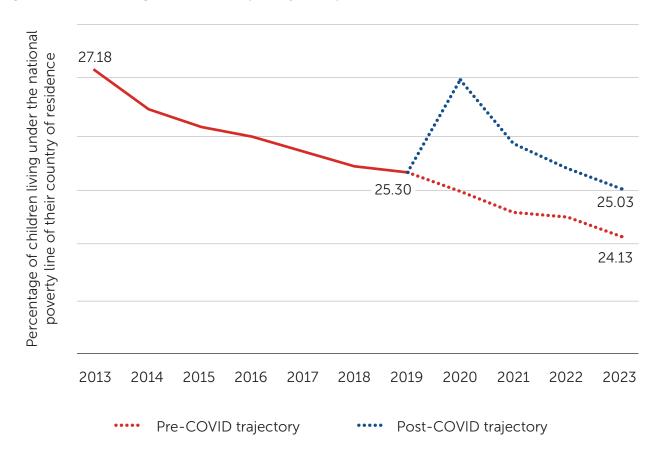


Figure 2: Children living under national poverty lines, pre-COVID and estimated current trends

Poverty and inequality

The post-pandemic economic recovery has been highly unequal, widening the divide between richer and poorer countries. Although many highincome economies have had some recovery from the devastating impact of COVID-19, in 2023, the poverty rate continued to rise in low-income and least-developed countries.³⁸ Many poorer economies are mired by debt and development gains are backtracking, with growing gaps in indicators such as child mortality and educational access. Ghana, once an African economic success story, is currently experiencing huge debt repayment challenges and paying more on interest than on health, while Nepal is considering cutting its health budget by 40%.³⁹ The current poor economic outlook associated with higher interest rates and high inflation presents a significant amount of uncertainty, with possible

economic contraction boding negatively for the world's poor. Within countries, inequality has also widened for indicators such as food and income security, particularly affecting low skilled workers, low-income households, informal workers, and women.⁴⁰

The case of Brazil illustrates how progress to reduce child poverty prior to COVID-19 has been reversed and social disparities between the poorer North and wealthier South of the country have widened. In Since 2000, Brazil had made significant gains in indicators of child poverty. By 2019, 99% of children survived until the age of five, and 91% of children under five were not stunted. However, due to the severe recession in Brazil as a result of the pandemic, the estimated percentage of families experiencing poverty and food insecurity grew from 19% to 25.4%, with 7.9% living in extreme poverty. Whereas prior

to the pandemic, Brazil's progress in child survival had been the fastest, child survival in the poorer northeast of Brazil is now stagnant. There has also been an increase in maternal mortality and a decrease in children's vaccine coverage in this area.

Wealthier countries have also seen an increase in child poverty. In the European Union, for example, the number of children at risk of poverty or social exclusion increased from 22.8% to 24.4%. ⁴² Children particularly at risk are those from single parent families, those with disabilities, those whose parents have low levels of education, and migrants and refugees.

Child development

One of the most cited statistics from the last decade is that approximately 250 million children under the age of five in low- and middle-income countries (LMICs) will not meet their developmental potential due to poverty and stunting.⁴³

Understanding the full impact of an assault such as poverty or a pandemic on child development requires insight into how many of the consequences only appear over time across the life-course. We know from 50 years of child development research that the consequences of separating infants from their caregivers is dire; that when young children are not consoled in their grief or don't have their anxiety mediated by caring and attuned caregivers, those fears and grief are amplified; and that when their nutritional needs are not met, they become malnourished and stunted. All of these have longterm consequences on the health and well-being of children and adolescents.44 When caregivers and caring adults are not available to help young children develop their mechanisms of emotional regulation, the result is a lifetime of poor school achievement, lack of healthy and satisfying relationships, unstable mental health, and reduced productivity.⁴⁵ COVID-19 impacted young children's development through the changed nature of their social interactions; impacted on the mental health of children and families, particularly mothers; and caused a significant loss of access to early childhood education and care.46 A systematic review and meta-analysis of studies⁴⁷ found that the first year of life during the

pandemic was significantly associated with the risk of communication delay among infants.

There are substantial gaps in evidence regarding the impact of the COVID-19 pandemic on early childhood development. There is a large disparity in the contribution of evidence, with 63% of empirical research studies and case reports originating from high-income countries while only 0.97% emanate from low-income countries. It is too early to fully understand the long-term impacts of the pandemic on the most vulnerable children. 48 Further research is required to determine the differential developmental impacts of COVID-19 on children in LMICs, where socio-economic protections from crises are limited compared to those of high-income countries. Further research is also required to understand the impact of increased orphanhood precipitated by the pandemic. Between March 2020 and April 2021, approximately 1,134,000 children experienced the death of primary caregivers. High levels of caregiver deaths per 1000 children occurred LMICs including Peru (10.2), South Africa (5.1), Mexico (3.5), Brazil (2.4) and Colombia (Hillis SD, 2021). Research indicates that stress, anxiety, and depression are common amongst orphans. 49 Prior research has pointed to the vulnerability of orphans in LMICs. For instance, a study including ten sub-Saharan African countries found that orphans are less likely to be enrolled in school due to their tendency to live with distant relatives and unrelated caregivers.⁵⁰

Disability

Children with disabilities are among the most disadvantaged groups globally. In addition to suffering from stigma and discrimination, they are often abused and neglected, with limited access to services, particularly in LMICs. Their families are more likely to live in poverty, which further amplifies their marginalization.⁵¹ The Global Burden of Disease Study of 2017 – which reported on the prevalence of childhood epilepsy, intellectual disability, and vision and hearing loss – estimated that 291.2 million (11.2%) of the 2.6 billion children and adolescents globally were affected by these disabilities. Further, their prevalence increased with age, from 6.1%

among children under 1 year of age to 13.9% among adolescents aged 15 to 19 years. The vast majority, 94.5%, of these children live in LMICs, predominantly in South Asia and sub-Saharan Africa. In spite of the prevalence of childhood disability, only 2% of global finance for early childhood development is allocated to children with disabilities.⁵² There are significant health and educational disparities for children with disability compared to children without disability as indicated in Figure 3.

One of the fiercest criticisms of the Nurturing Care Framework has been the argument that it ignores disability. While some of the criticisms are based on a mis-reading of the framework (see Olusanya and colleagues, who argue that the framework is based on poverty and stunting (it is not), and that it excludes disability (it does not) –but the main

thrust of the criticisms warrant attention. 53 54 The criticism that the responsive caregiving domain fails to fully account for the emotional challenges faced by parents of children with disabilities, particularly in unsupported settings with high levels of stigma and discrimination, has validity. Criticism also points to the framework's lack of alignment with the Sustainable Development Goal 4.2 promoting school readiness toward inclusive education for children aged <5 years with or at risk for developmental disabilities. 55 In response to these gaps, there has been an attempt to broaden the scope of the NCF to include all children irrespective of their abilities and calls for a dedicated global ECD initiative to address the needs of children with disability together with ringfenced funding.

Figure 3: Characteristics of children with disabilities compared to children without disabilities

Children with disabilities are...



18% less likely
to have
improved sanitation
facilities in their
households

18% less likely to have improved drinking water sources in their households

10% less likely to have water and soap for handwashing in their households



1.9 times more likely to have diarrhoea

likely to have acute respiratory infection symptoms 1.5 times more likely to have **fever**



57% less likely to have **children's books** in their households

23% less likely to engage in early stimulation activities 32% less likely to read books or be read to at home

Source: UNICEF, 2020



Health

Vaccination

The pandemic led to significant disruptions to routine vaccination of children –a critical path of development, leading to benefits including increased financial resilience of families and economic growth.⁵⁶

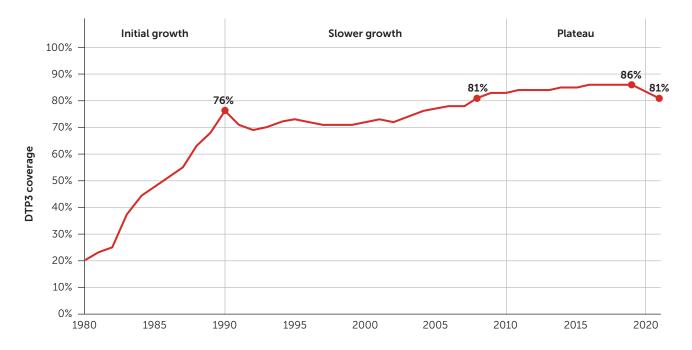
Between 2011 and 2020, for 10 diseases in 24 Low- and middle-income countries (LMICs), every US\$1 invested in vaccination delivered a US\$26.35 return on investment, based on a 'cost-of-illness' approach.⁵⁷ Routine vaccination has also been shown to increase children's participation in education and reduce entire communities' vulnerability to disease through herd immunity.

Even prior to the pandemic, many children missed out on vaccination, with little growth in global child vaccination coverage over the last decade (see Figure 4).⁵⁸ Many of these children live in the

poorest and most marginalized communities, facing challenges of vaccine availability, affordability, and accessibility. For example, in the poorest households, over 1 in 5 children are zero dose – i.e., have not received any vaccinations –compared to 1 in 20 children in the wealthiest households (see Figure 5).

The low vaccination level in marginalized communities is a driver of furthering inequality, as poorer unvaccinated children do not obtain the socio-economic benefits conferred by routine vaccination. Vaccination fell sharply between 2019 and 2021, with the percentages of vaccinated children dipping by 5 percentage points, resulting in one fifth of children not being protected from preventable diseases. UNICEF estimates than 67 million children missed out entirely or partially on routine immunization during the pandemic – 48 million of them missing out entirely.⁵⁹

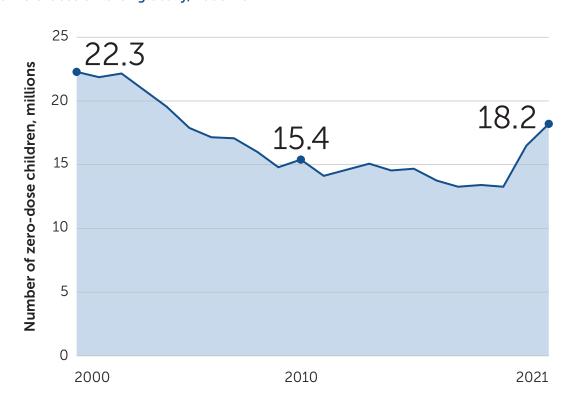
Figure 4: Backsliding in vaccination coverage during the pandemic came at the end of a decade that saw little growth. Percentages of under-vaccinated children, 1980-2021



Children in parts of Africa and South Asia are at a higher risk of not being vaccinated. Many of these children reside in remote areas or informal urban settlements or experiencing extreme weather events where they are subject to multiple deprivations such as poor access to health and social services. The backsliding of vaccination levels is the result of, inter alia, the unprecedented pressure on health systems, a shortage of health workers, stay-at-home recommendations, and confusing communication with parents during the pandemic. Disruptions were also related to conflicts in places such as Ukraine, Somalia, and Ethiopia, and to extreme weather events.

In some cases, lower vaccination levels have led to the reduction in herd immunity to serious illnesses, resulting in disease outbreaks. For example, the number of measles cases doubled in 2022 compared to the previous year, in part a result of a 5-percentage point fall in the number of children who received their first measles vaccine during the pandemic. The impact of lower vaccination is compounded by socio-economic variables which increase vulnerability to preventable diseases. For example, refugees and displaced people may have limited access to clean water and sanitation and be exposed to overcrowding. These conditions raise the risk of outbreaks of vaccine-preventable diseases. For

Figure 5: Zero-dose children globally, 2000-2021



Source: WHO and UNICEF, Estimates of National Immunization Coverage, 2022

Maternal and child mortality

The under-five mortality rate per 1000 live births is a reflection of the socio-economic and environmental conditions in which children live, and the accessibility and quality of health care available to them.64 Globally, the under-five mortality rate has reduced substantially since 1990.65 However, in 2021, 5 million children died before turning 5 due to poverty, inadequate access to healthcare, and conflict. 66 The highest incidence of child mortality was in sub-Saharan Africa, with 74 deaths per thousand live births, compared to the global average of 38 deaths per 1000 live births. More than 80% of under five deaths occurred in this region and in Southern Asia. The under five mortality in countries experiencing conflict was considerably higher than average. For example, in South Sudan, where civil war has existed since 2013, the under-five mortality rate in 2021 was 99.67

The available evidence indicates that the direct impact of COVID-19 on child mortality has been limited. Among the 4.4 million COVID-19 deaths, only 0.4 per cent (over 17,400) occurred in children and adolescents under 20 years of age. Of the over 17,400 deaths reported in this age group, 47% were among children ages 0–9.⁶⁸

However, a systematic review and metanalysis of studies indicates that overall, the global maternal and fetal outcomes did deteriorate during the pandemic, with an increased number of avoidable maternal deaths, stillbirth, and ruptured ectopic pregnancies. There is evidence of considerable disparity between high-income and LMICS⁶⁹ –while outcomes in LMICs deteriorated, possibly due to inefficiency of healthcare systems, there was a reduction in preterm birth in high-income countries during the pandemic, driven by a reduction in spontaneous preterm births.

There are remaining questions regarding the indirect effects of the pandemic on child mortality. Overextended health systems, loss of household income, and disruptions to health interventions such as vaccination may have had a more significant impact on child mortality. Although a global analysis of excess mortality in 2020 and 2021 by the United Nations Inter-agency Group for Child Mortality

Estimation found no evidence of widespread, significant excess mortality among those under age 25,70 a limitation of the study was the relatively high percentage of high-income countries included and lack of disaggregated data by age and subnational level. It remains possible that there was excess child mortality in LMICs associated with more severe disruptions of health systems in certain areas, and that marginalized populations within countries were not adequately represented in the analysis.

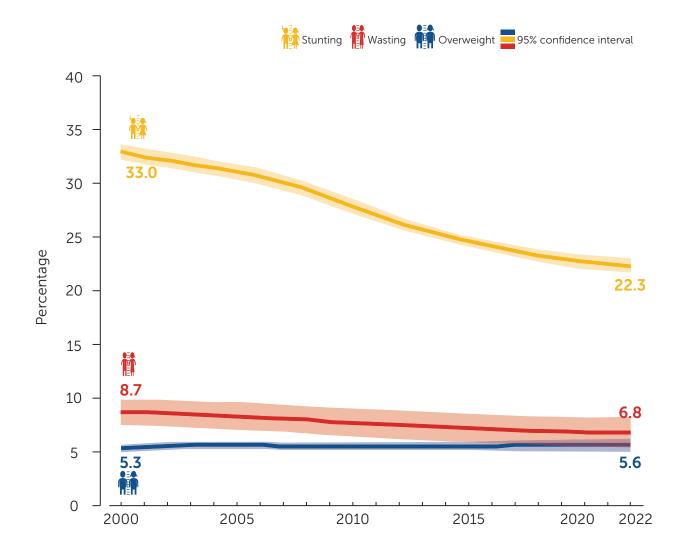
Mental health

Crises- whether humanitarian, viral or climaterelated – intensify inequalities and leave children particularly vulnerable. Lockdowns increased family and support system mental health difficulties, disrupted access to food and health services, and diminished the protective nature of peer groups and the school system. The bedrock of enabling environments in the early years is the family. The pandemic, but also decades of rising inequality and political instability, threatened the security of homes and reduced the capacity of caregivers to provide the types of care and secure environments that are foundational to children at a time when they are developing resilience and meeting their developmental potential. A global scoping review of the effects of COVID-19 on maternal mental health, early childhood development, and parental practices⁷¹ outlined how the pandemic's stressors were detrimental to children and identified the increased burden of childcare and housework on mothers as the most important risk factors for increased maternal stress and parenting styles harmful to childhood development. Findings of the impact of COVID-19 on mental health are mixed, with particularly strong associations found in some contexts but not others.⁷² Having said this, it appears incontrovertible that 3 years of a pandemic-during which millions of children experienced significant losses of loved ones and schooling – followed by an economic recession, will result in significant impacts on mental health.73

The negative impact of poverty as a leading social determinant of the mental health of children is well established.⁷⁴ Poverty exposes children to mental health risks such as stress, violence, and trauma. Financial strain also indirectly predicts increases in child mental health problems through the pathway of worsened parental mental health.⁷⁵ The impact of increased poverty on children's mental health is also

likely to be gendered, with girls suffering more than boys. In low-income settings, the combined effects of increased poverty and lost education for girls is projected to have significant adverse long term effects – such as an increase in early marriage, with up to 10 million more girls predicted to be at risk of becoming child brides over the next decade.⁷⁶

Figure 6: Percentage of children under 5 affected by stunting, wasting and overweight, global, 2000–2022



Source: UNICEF, WHO, World Bank Group Joint Malnutrition Estimates, 2023 edition

Food insecurity

As discussed previously, in 2023, many more children were living in poverty than prior to the COVID-19 pandemic. This led to an increase in malnutrition, as food security decreased and poverty-related conditions such as stunting grew.⁷⁷ Prior to COVID-19, there had been a consistent downward trend in stunting globally, but, since 2020, there has been a 0.3% increase (from 22% to 22.3%). This is likely due to deteriorations in household income and disruptions in the food system during the pandemic.⁷⁸ The full impact of the pandemic on stunting is expected to emerge over time and will

be influenced by the duration of pandemic-related shocks to the economy, food systems, and health systems. There has also been a small increase in the percentage of children experiencing wasting, from 6.7% to 6.8% (48, 49). The effects of food insecurity are most commonly seen in areas of converging drought and conflict, such as in the Greater Horn of Africa where subsistence farmers and rural communities have witnessed depleted water sources, crop destruction, and unprecedented death of their livestock.⁷⁹



School closures

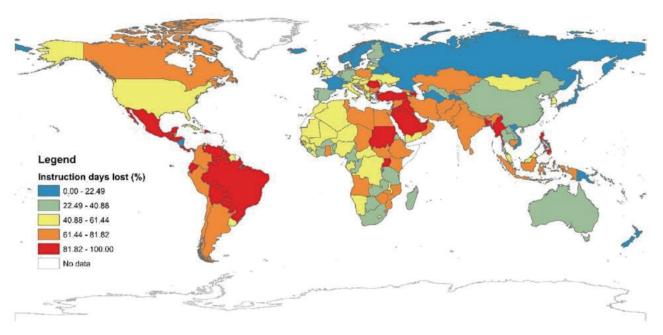
Pre-primary school closures

At the height of national lockdowns, over 180 million children globally had their pre-primary schooling disrupted,80 depriving them of the cognitive stimulation and socio-emotional development essential for future learning (see Figure 7). Children who miss out on learning in the early years tend to lag behind for the remaining time they spend at school.81 In many cases, the interruption of in-person schooling denied children their protection network and their right to safety.82 For example, in 2020, Brazil reported their highest levels of violence against children since 2013. In South Africa, the loss of daily meals for children attending preschools significantly affected their access to food.83 Lockdowns also led to greater levels of learning inequality. In Rio de Janeiro in 2020, for example, preschool children in general gained only 65% of the education they would have had in face-to-face interactions, while the most vulnerable children learned only 48%

of what they would have learnt under normal circumstances.⁸⁴

The COVID-19 pandemic also had a number of unanticipated consequences for the ECD sector. Many preschools closed, leading to job losses in a sector with high rates of practitioner attrition, even under usual circumstances.85 This was particularly true for unfunded preschools reliant on fees. The full implication of pre-primary closures is not yet known. An early modelling study examining the potential consequences of the pandemic on early childhood care and education, 86 which used data collected prior to 2020, estimated that disruptions to early childhood care and education would result in just over 19 billion person-days of lost instruction.87 Other estimates of learning losses across all school years initially estimated that this generation of students would lose US\$10 trillion in life-time earnings (2020)⁸⁸ – an amount that has since been updated to US\$17 trillion, and then to US\$21 trillion.89

Figure 7: Estimated percentage of days of ECCE instruction lost due to COVID-19-Related ECCE closures between March, 2020 and February, 2021, by country



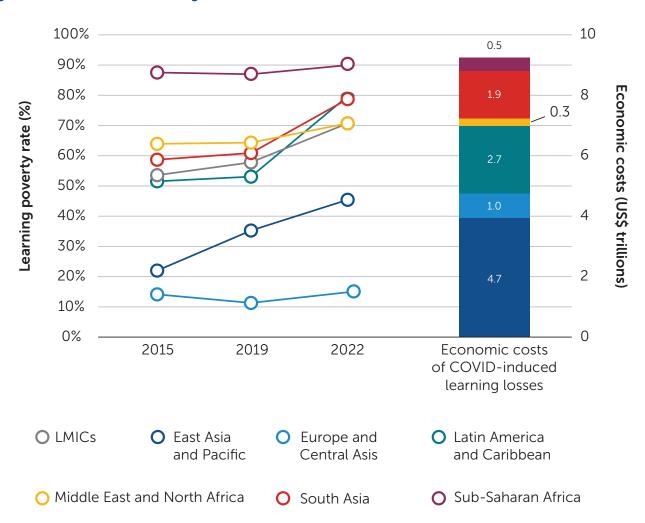
Source: McCoy et al, 2021, Child Development

Primary education

There were large differences between countries in the percentage of instruction days lost for primaryaged children during COVID-19 (see Figure 8). In the first year, from March 2020 to February 2021, schools were fully closed for an average of 95 instruction days globally, which represented approximately half the time intended for classroom instruction. This contrasts with an average of 158 days of school closures in Latin America and the Caribbean, and 146 days in South Asia. Countries

in eastern and southern Africa were the third most affected, with an average of 101 lost school days. Remote learning platforms were employed globally as a substitute for in-person instruction, yielding varying degrees of effectiveness, and with children from affluent communities experiencing greater advantages. The reach, effectiveness, and functionality of remote learning programs were often insufficient for primary school students, possibly due to their less developed self-regulation skills.⁹¹

Figure 8: COVID-induced learning and economic losses in LMICs



Source: UNESCO; State of Global Learning Poverty: 2022

The disruption of education during COVID-19 led to substantial learning losses, as indicated by the increase in 'learning poverty', an indicator of which is being "unable to read and understand a simple text by the age of 10".92 Children without foundational reading skills by ten are likely to have significant difficulties in mastering reading later, impacting on their educational progress and their ability to thrive in the workforce, as well as on countries' development of human capital. In 2022, the learning poverty rate increased to 70% in LMICs - compared to 57% prepandemic – with losses particularly acute in South Asia, the Caribbean and Latin America where schools were closed the longest. More data are required to determine whether gender equality was impacted by the pandemic, but there is evidence that educational access was different for boys and girls, in terms of access to devices and time spent doing chores.

The closure of schools due to COVID-19 worsened the inequalities that affect children in humanitarian settings characterized by high levels of conflict, displacement and economic fragility. Education systems in these environments experienced an

unparalleled state of vulnerability.⁹³ In Syria, for example, one third of schools have been destroyed in the ongoing conflict. Children who are able to attend school often do so in overcrowded classrooms and in buildings with insufficient sanitation and water facilities, electricity, or ventilation.⁹⁴ Educational access is also impeded by the climate crisis across Africa, with school enrolment rates down by 20% in regions affected by drought and a consequent hunger crisis.⁹⁵ Children in Somalia, which is affected by both conflict and the climate crisis, report levels of hunger that prevent them from being able to walk to school and focus in class. Many discontinue school prematurely in order to earn income to support their families.

Children with disabilities are particularly vulnerable with respect to education. Due to stigma and a lack of services and support, many are not properly accommodated within the school system, experience large amounts of discrimination, and tend to have substantially poorer foundational reading and numeracy skills compared to children without a disability.⁹⁶



Conflict and humanitarian settings

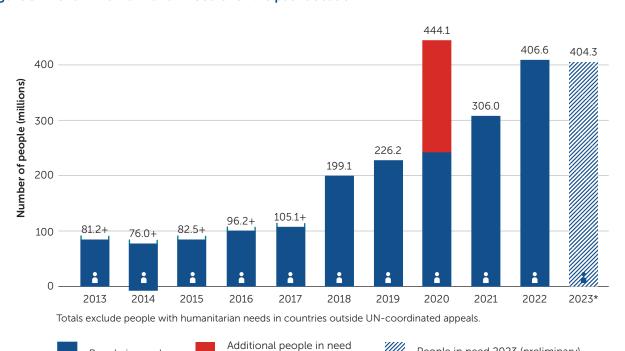
Armed conflict is associated with levels of extreme stress for children. Children may be directly affected through exposure to events such as rape and killing, and indirectly affected through impacts on their primary caregivers.97 A systematic review of mental health outcomes of children from birth to age six who were exposed to war identified symptoms of post-traumatic stress disorder (PTSD), depression, sleepproblems, disturbed play, and psychosomatic symptoms such as stomach aches (Vossoughi, 2018).

In the Ukraine, The United Nations Independent International Commission of Inquiry on Ukraine found that the current conflict has increased the incidence of violence – including torture and sexualand gender-based violence – with victims as young as four years.98 Many children have experienced displacement and/or separation from their families. The exposure to violence and the subsequent forced displacement and separation have had a profound negative impact on the mental wellbeing of these children. According to reports from parents, 75% of

children have exhibited symptoms of psychological trauma, while 16% have shown signs of impaired memory, reduced attention span, and diminished learning capacity.

Estimates indicate that the need for humanitarian assistance has doubled in the last five years and increased fivefold since 2013 (see Figure 9). Almost half of all those in need are living in countries facing a combination of high-intensity conflict, socio- economic fragility, food insecurity, and climate change (see Figure 10).99 These crises are having multi-fold humanitarian impacts for children, including forced displacement, soaring malnutrition, and disease outbreaks, 100 101 with a growing pressure on the humanitarian system to respond. Currently, there are more children in need of humanitarian aid than any time since World War Two. More than 400 million children are living in areas of conflict, the highest since the 1990s, and an estimated 1 billion children are living in areas of significant vulnerability to the impacts of climate change. 102

People in need 2023 (preliminary)



due to Covid-19

Figure 9: Trend in humanitarian need over the past decade

Source: Development Initiative estimates, 2022

People in need

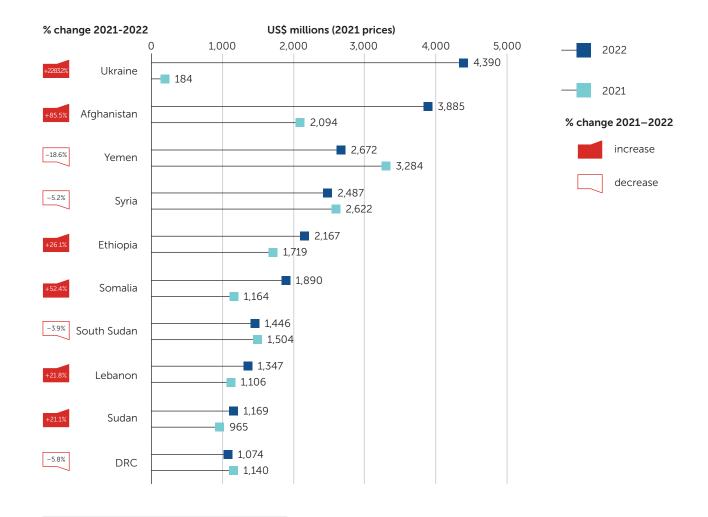


Figure 10: 10 largest recipient countries of international development assistance

Notes: DRC = Democratic Republic of Congo, Data is in constant 2021 prices. Totals for previous years differ from those reported in previous GHA reports due to deflation and updated data.

Source: Development Initiatives, 2022

Half of all people in humanitarian need – 90. 3 million – are under the age of 18. 103 Eighty percent of current humanitarian needs arise from conflict and the consequent mass migration of refugees and displaced persons, which was a key driver of humanitarian need in 2022 (see Figure 11). 104 Conflict limits access to essential needs such as food and water and drives people into extreme poverty. The ability to provide humanitarian assistance to conflict-affected areas has deteriorated in recent years, with increased violence against humanitarian workers and

assets (UNICEF, 2023c). Food insecurity is also a key driver of humanitarian need, and is both a driver of conflict and worsened by the interacting risks of the polycrisis.

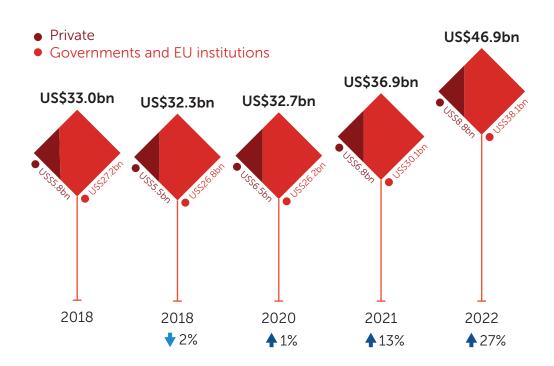
Because of these crises, the number of displaced children has grown to nearly 37 million. Many are separated from their families or unaccompanied, and are living without immigration status and access to the health care and education services essential for their development and well-being. On their journeys they often experience danger, deprivation, illness,

rights violations, and death. When unaccompanied, displaced children and refugees face high risk of abuse, exploitation, violence and trafficking, ¹⁰⁵ with girls being at higher risk. ¹⁰⁶

Even though a combination of institutional and private humanitarian funding increased by 27% in 2022, ¹⁰⁷ humanitarian aid agencies are facing an unprecedented challenge to meet the need due to the number of crises and volume of people affected. Apart from the increased need, global inflation and currency depreciation reduces the purchasing power of LMICs and consequently increases the cost of program delivery. Despite the increase in funding, funding constraints are expected to continue as the gap increases between growing needs and funding commitments. ¹⁰⁸ In 2022, 10 countries received almost two-thirds of all available funding, with Ukraine receiving \$4,390 million in one year.

On Monday, July 3rd, 2023, the world faced the hottest day on record in 125 years. It held that record for exactly 24 hours before Tuesday, July 4th2023 became the new record holder. One analysis suggested that in July 2023 the world experienced the hottest 20 days in a row for the last 120,000 years.¹⁰⁹ It is estimated that the combination of environmental crises and political instability will result in 2.3 billion people living in conflict settings or fragile countries by 2030.¹¹⁰ In early October 2023, UNICEF published a report describing how between 2016 and 2021 there 43.1 million internal displacements of children due to weather related disasters. This equates to 20, 000 child displacements per day for six years.¹¹¹

Figure 11: Humanitarian funding trends



Source: Development Initiatives, 2022 Climate change/breakdown

In December 2022 the Asia-Pacific Regional Network for Early Childhood (ARNEC), in partnership with UNICEF, Save the Children, and the Bernard van Leer Foundation, published a report entitled From Most Vulnerable to Most Valuable: A scoping study on putting young children at the heart of environmental and climate actions. The report is a scoping study of existing evidence for how climate change will impact young children. Citing evidence from UNICEF, 113 114 the report describes why it is that infants and children are likely to disproportionately experience the impacts of climate change and environmental degradation 115 116:

- Infants under 12 months are unable to regulate their temperature, and because they are immobile are not able to seek out cooler places or control their environment in any way;
- Children require more food and water per unit of body weight compared to adults, and because their bodies are still developing, they are particularly vulnerable to environmental hazards (even small amounts of toxic chemicals – such as lead – can have lifelong consequences);

- Almost 90% of the burden of disease associated with climate breakdown will be experienced by children, as they are more susceptible to infectious diseases than adults;
- Given their dependency on adults, young children are more vulnerable to extreme events such as floods or drought.

Climate breakdown has catastrophic impacts on child mental health through stressors including increased water and food insecurity. 117 Climate breakdown is leading to high levels of displacement, producing emotional sequalae including grief, loss, trauma, and depression. 118 In addition, extreme events such as floods and fires destabilize communities resulting in increased stress that may lead in turn to increases in aggression and conflict. 119 In particular, these events severely impact women and children though an increased risk of gender- based violence and sexual exploitation. Girls are fourteen times more likely to be harmed during a disaster. 120 Access to education for girls in the Greater Horn of Africa (GHoA) has also been impeded.121



Financing

National expenditure on early childhood development

According to UNICEF, the optimal investment for children and families is 'frontloaded', so that the highest investments – including social protections such as cash benefits – start in the prenatal period and decrease incrementally through the preschool years, levelling out once adolescents pass through the education system. Investing in the early childhood period provides protection to children and families, mitigating vulnerabilities associated with pregnancy, birth, and early years. By prioritizing resources during this critical phase, later public investments to address shortcomings in areas of family wellbeing and child development may be avoided, therefore optimizing spending in the long-term.¹²²

Inequality in spending

Despite evidence on the benefits of early investments, a recent study¹²³ of child policy expenditure on children from 84 countries prior to the COVID-19 pandemic – representing 58% of children globally – found that, in general, spending on childhood occurs "too little and too late" in the life-course. There is increasing inequality within and between countries in education expenditure¹²⁴ – low-income countries spend \$11,000 per child for those attending preschool and completing compulsory school, however, only 6.7% of funding is reserved for children under six. In contrast, high-income countries are spending \$195,000 per child in both school and preschool, with 27% going to children under six.

Lack of universal consensus on pattern of expenditure

The study also found that there is a lack of universal consensus on optimal expenditure, indicating inadequate alignment with the existing body of

evidence. More than 50% of countries studied were found to have 'backloaded' profiles - with relatively minimal welfare spending in infancy, increasing to its maximum at around 15 years within the school system. This approach may assume that children arrive in the education system being more able to take advantage of higher expenditure. However, it results in disproportionate weight on the education sector to address children's development needs. In some instances, backloading occurs due to falling participation rates in education, with fewer children benefitting from higher per capita spending, exacerbating inequality between those who leave school prematurely and those who remain. Backloaded profiles tend to be in LMICs, including Mali, Tanzania, Togo, Madagascar, and Zambia. 125 Some countries have 'flat' profiles, which maintain the same level of spending throughout childhood. Flat profiles are most commonly seen in highincome countries, such as Finland and Germany. This flat pattern is generally the result of higher per capita spending in the early years, matched by expenditure in secondary education.

The disparity between high-income settings and other countries is most evident in the lack of social protection spending in cash benefits, child allowances, and in-kind services in the preschool period. Social protection spending is the dominant form of welfare in high-income countries, and average spending is around 18 times higher than that seen in low- and middle-income countries globally. Fewer than one in two children worldwide receive any form of social protection. In the poorest countries where more than 40% of children live in extreme poverty, expenditure on debt repayment is consistently higher than on social welfare (UNICEF, 2021). Inequality within countries is being driven through age-related spending that favours families with older children who have stayed in school – this drives intergenerational inequality, as higher levels of education are associated with higher earnings. 126

International development funding for ECD in emergencies (ECDiE)

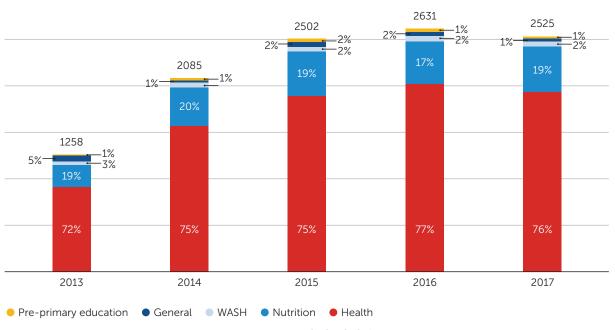
Children growing up in crisis settings encounter a range of risks that threaten their physical, cognitive and socio-emotional development, and their nurturing relationships. Without intervention, the impact of these vulnerabilities aggregate to present long-term risks projecting through the life-course.¹²⁷ Quality early childhood services in crises can mitigate risks so children can reach their developmental potential. However, the funding needs for ECDiE are currently unknown and there are few data on global funding levels.¹²⁸ In 2020, the Moving Minds Alliance presented the first analysis of existing funding for ECDiE, based on data obtained in 2018 and using a two-track methodology delineating:

- 1. Development aid to countries affected by crisis;
- 2. Humanitarian aid explicitly targeting early childhood interventions

Development aid

According to the Alliance, the share of development aid for ECDiE in crisis affected countries is uniformly low, although it increased marginally to 3.3% in 2017 (from 2.7% in 2013) (see Figure 12). The assistance is strongly aligned to health-related needs, with 95% of funding for ECDiE allocated to health and nutrition, and 2% allocated to water, sanitation and hygiene (WASH). There is evidence that funding for preprimary education has decreased from 3% in 2002 to only 1% in 2018. 129 Responsive caregiving and child protection, two essential elements of nurturing care, are not tracked and therefore cannot be specified. Disability is the least funded area of development assistance for young children. 130

Figure 12: Development aid for ECD in crisis-affected countries, by sector, US\$ millions



Note: Responsive care and child protection are not tracked in OECD CRS; funding cannot be separated

Source: Moving Minds Alliance/SEEK Development estimates, 2020

Between 2007 and 2016, only 0.6% of development aid was channeled for children with disability despite the significant health, social, educational, and economic inequities that they experience. There is a trend of multilateral donors playing an increasing role in development funding of ECDiE, with an increase to 51% in 2017 from 39% in 2013. The World Bank is playing a significant role by increasing its share of funding from 4% in 2013 to 11% in 2017. The remaining funding continues to be received from traditional bilateral donors. There is an opportunity to integrate the missing elements of nurturing care into existing large vertical health funds – such as the Global Fund to Fight Aids, Tuberculosis and Malaria – by working the target populations.

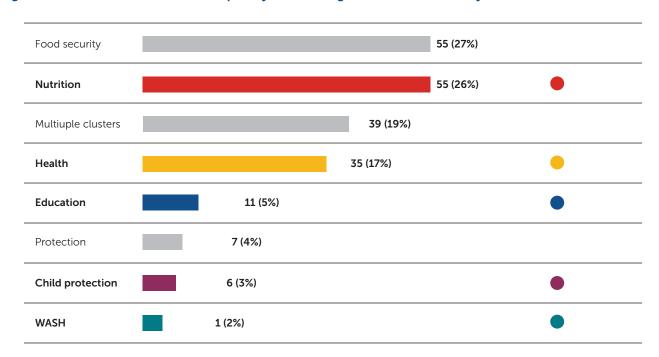
Humanitarian assistance

Most humanitarian funding for improving ECD is provided by three bilateral donors – Germany, the United Kingdom, and the European Union– with 70%

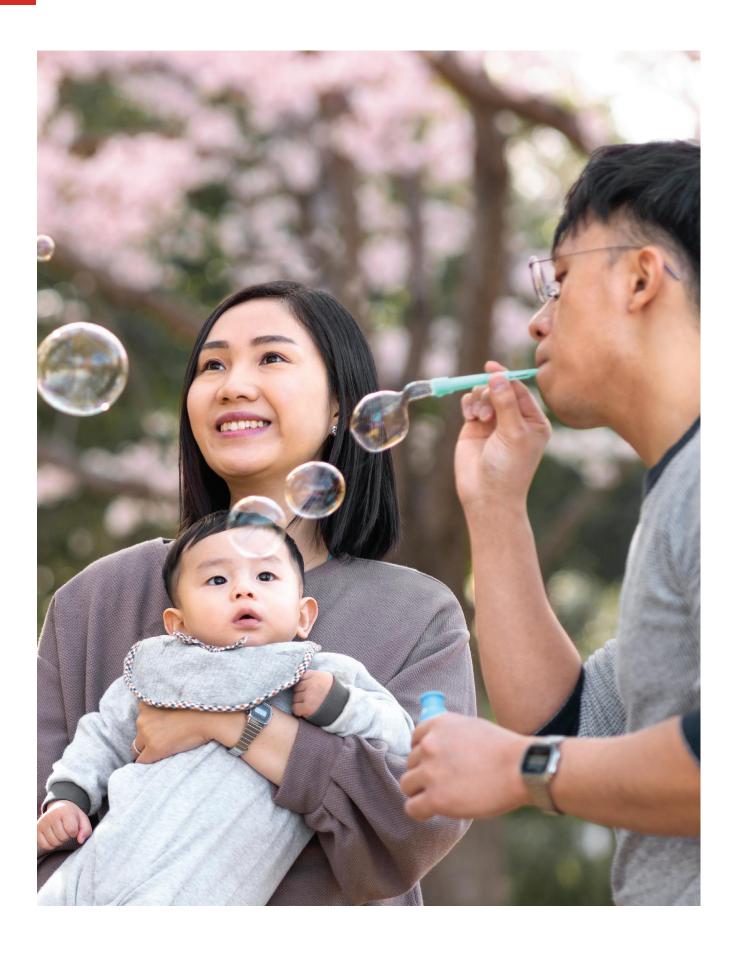
of the funding being channelled via United Nations agencies and international NGOs.¹³³

Humanitarian funding for ECD is difficult to trace as there is no agreed methodology to track these funds within the wider range of allocations. An examination of data from the United Nations Office of Humanitarian Affairs Financial Tracking Service in 2018 revealed that very little humanitarian funding is explicitly allocated for children under five. 134 Only 2% of humanitarian funding is allocated to ECDiE, mostly being designated to food security and nutrition, with small percentages for child protection (3%) and WASH (2%) within 309 programs (see Figure 13). In spite of the understanding that an integrated, cross- sectional approach is required for children to reach their developmental potential, 135 much of the humanitarian funding is siloed within sectors. Only 19% of ECDiE humanitarian funds is reported as multisector funding.

Figure 13: Humanitarian aid flows explicitly mentioning ECD interventions, by cluster, 2018, US\$



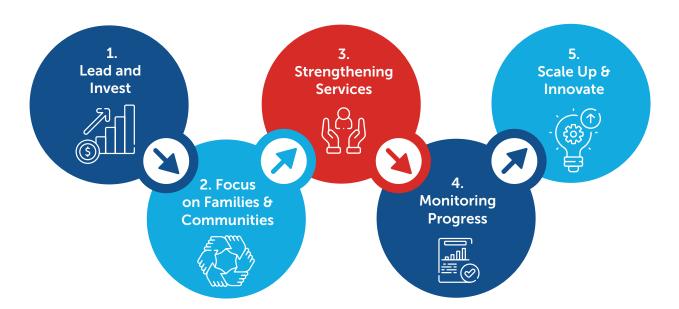
Source: Moving Minds Alliance/SEEK Development estimates, 2020



Progress on adoption of the Nurturing Care Framework

In 2018, building on decades of progressive agreement on the importance of addressing the essential needs for optimal early childhood development, the World Health Organization, UNICEF and the World Bank, in collaboration with the Partnership for Maternal, Newborn and Child Health and the Early Childhood Development Action Network, published the Nurturing Care Framework (NCF). ¹³⁶ In 2023, the NCF Progress Report ¹³⁷ was released reflecting on five years of implementation.

The report reflects on the adoption of the framework by governments and partners and notes the important role it has played in advancing a shared vision and language of nurturing care while catalyzing multi- stakeholder partnerships committed to this vision. The report outlines progress with respect to the framework's five strategic actions, which is summarized below.



Strategic action 1: Lead and invest

Key take-aways from the report included that there has been a 48% increase in the number of LMICs with a national policy or action plan for ECD (see Figure 14). Many new and revised policies and plans focus on all five components of nurturing care, and there is growing evidence of multi-stakeholder partnerships to address nurturing care.

Strategic action 2: Focus on families and their communities

Key takeaways from the report included the central role the family plays in creating a stimulating, secure, and safe environment for children. There has also been a significant increase in the number of stakeholders strengthening advocacy and engagement with local communities e.g., through parenting support and media outreach.

Strategic action 3: Strengthening services

There is evidence of an increased breadth of services to include all components of nurturing care. In addition, more than 80% of countries responding to a survey reported that frontline workers are being trained to strengthen caregivers' capacity to provide children with responsive care and opportunities for further learning.

Strategic action 4: Monitoring progress

Profiles for ECD have been developed for 197 countries, reporting on a harmonized set of indicators for nurturing care. There is an increased use of established monitoring tools, such as the Early Childhood Development Index 2030 and the Global Scales for Early Development (see Figure 15).

Strategic action 5: Scale up and innovate

There is a growing research depository of peer-reviewed publications, providing evidence for effective interventions. Over 570 academic articles have cited the framework, with a growing body of evidence of innovative interventions for scaling. The report notes the following important actions to maintain the momentum of embedding the nurturing care framework within global ECD policy:

- 1. Identification of new measures and locallyproduced evidence for development of policy, implementation, and budgeting frameworks
- 2. Encouraging initiatives at regional and community levels to leverage existing positive practices, resources, and champions
- 3. Enhancing the capacity of systems to support all children, including those requiring additional assistance, and deliver high quality care
- 4. Streamlining and consolidating past experiences to establish clear roles and responsibilities for each sector and service
- 5. Generating local evidence on effective and ineffective approaches to enhancing child development outcomes and reducing inequality.

Figure 14: Selected examples of national policies and plans that integrate nurturing

| Belize ECD National Strategic Plan 2017-2021 | Malta National Policy Framework for Early Childhood Education and Care 2021 |
|--|--|
| Bhutan National Multi-Sectoral Early Childhood Care and Development Strategic Action Plan 2021-2030 | Mexico Estrategia Nacional de Atención a la Primera Infancia [National Strategy for Integrated ECD] 2020-2024 |
| Cambodia National Action Plan on Early Childhood Care and Development 2022-2026 | Nepal National Strategy for ECD 2020-2030 |
| El Salvador Crecer Juntos [Grow Together Policy] 2020-2030 | Philippines National Early Childhood Care and Development Strategic Plan 2019-2030 |
| Iraq National Strategy for ECD 2022-2031 | Congo Politique Nationale de Développement Intégré de la Petite Enfance [National Policy for Integrated ECD] 2022-2030 |
| Kiribati ECD Policy 2022-2032 | United Republic of Tanzania National Multisectoral ECD Programme 2021-2026 |
| Malawi National Strategic Plan for Integrated ECD 2018-2023 | Vanuatu National Policy for ECD 2023-2027 |

Source: Nurturing care framework progress report 2018-2023; 2023

Figure 15: Selected examples of measurement progress

COUNTDOWN TO 2030 COUNTRY PROFILES ON EARLY CHILDHOOD DEVELOPMENT

Presenting available data for country and crosscountry monitoring

EARLY CHILDHOOD
DEVELOPMENT INDEX 2030

Global measure to track children's development from 24 to 59 months

GLOBAL SCALES FOR EARLY DEVELOPMENT

Global measure to track children's development from birth to 36 months The Countdown to 2030 Country profiles on early childhood development were established in 2018 in collaboration with the Countdown to 2030 for Women's, Children's and Adolescents' Health. The 197 country profiles present the latest available and comparable national data on various indicators across the five components of nurturing care. Data on all indicators are drawn from various publicly available global databases maintained and regularly updated by United Nations agencies and other organizations. The next iteration of the country profiles is expected to be released in 2023.

The ECDI2030, developed by UNICEF, is recognized by the InterAgency and Expert Group on SDG Indicators as a suitable measure for monitoring and reporting on SDG indicator 4.2.1 (the proportion of children 24 to 59 months of age who are developmentally on track in health, learning and psychosocial wellbeing). It covers the three domains of development using a few questions to generate the final measure in a simple and cost-efficient way. The ECDI2030 may be integrated into national data collection efforts, such as household survey programmes, including Multiple Indicator Cluster Surveys and Demographic and Health Surveys. Beginning in 2023, the ECDI2030 module will become a standard part of the Multiple Indicator Cluster Survey 7.

The Global scales for early development were created to measure and monitor development for children from birth to 36 months of age at the population level. The GSED package includes measures to facilitate data collection at population and programmatic levels. The measures were derived from 18 instruments used in 32 countries. Version 1.0 of the GSED package, launched by WHO in 2023, provides stakeholders with measures of child development for infants and toddlers, valid and reliable across various geographic, cultural and language contexts. Work is ongoing to create global norms and standards for child development up to 36 months and to adapt the GSED package for individual-level assessment of children with or at risk of neurodevelopmental impairment.

Source: Nurturing care framework progress report 2018-2023; 2023

Figure 16: Selected Example of Scale up

EUROPE AND CENTRAL ASIA

Evidence-based apps reach caregivers on a large scale The Bebbo mobile app, launched by the UNICEF Regional Office for Eastern Europe and Central Asia in 2021, is a free parenting support app that provides caregivers with expert advice on a range of child health and development issues, from nutrition and breastfeeding to early learning and the value of play, responsive parenting, protection and safety. Some of its features include games for caregivers and children, ideas on engaging in playful interaction with children through these games stimulating learning and development, tracking children's milestones and assisting caregivers in supporting development through play. Available in 14 languages, the app has reached over 300 000 users, and is part of the humanitarian response to the war in Ukraine. It will soon be updated to include additional guidance on caregiver well-being.

Source: Nurturing care framework progress report 2018-2023; 2023

Nurturing care in humanitarian settings

Since the launch of the Nurturing Care Framework a number of thematic briefs have been published, which make the case for applying a nurturing care lens to particular issues affecting children's development (nurturing care for children affected by HIV; nurturing care for every newborn; nurturing young children through responsive feeding Nurturing care for children living in humanitarian settings was one of the first briefs to be published. Given the unique issues to do with dealing with young children in migrant and humanitarian settings, we undertook a brief search of international and INGO documents, to provide a snapshot of how these organizations conceive of nurturing care recommendations in the context of humanitarian

emergencies. Key takeaways from the brief survey of major documents are (see Table 2):

- Whilst nurturing care recommendations remain the same in humanitarian settings, there may be a need for adaptation given specific needs and challenges in these settings
- Supporting nurturing care in humanitarian settings will require:
 - Awareness and planning
 - Leadership
 - Different sectors working together (on regional and national levels)
 - Establishing basic services and providing resources to meet needs
 - Long term and sustainable ECD funding

Table 2: Documents related to humanitarian settings

| Source | Title | Takeaways |
|--------------------------|--|--|
| WHO, 2020 ¹³⁸ | Nurturing care for children living in humanitarian | Nurturing care recommendations remain the same in humanitarian settings but implementing them may involve adaptation given specific needs and challenges |
| | settings | Leadership is needed to drive early childhood development in emergencies |
| | | Action for early childhood development in humanitarian settings involves raising awareness and strengthening planning by governments across the education, health, sanitation, and social affairs ministries as well as across national and subnational levels among both development and humanitarian authorities |
| | | Will require different sectors to work together |
| | | Once basic services have been established and are functional, relevant stakeholders should dedicate resources for preventive and promotive care, mental health, trauma-informed psychosocial support, counselling to support parenting practices, and care for children with additional needs |
| | | All infants and children receive responsive care during the first 3 years of life, and parents and other caregivers are supported to provide responsive care |
| | | All infants and children have early learning activities with their parents and other caregivers during the first 3 years of life, and parents and other caregivers are supported to engage in early learning with their infants and children |
| | | Support for responsive care and early learning should be included as part of interventions for optimal nutrition of infants and young children |
| | | Psychosocial interventions to support maternal mental health should be integrated into early childhood health and development services |

| Source | Title | Takeaways |
|---|--|---|
| War Child ¹³⁹ | Approach | Children have the skills and ability to shape their lives and cope with adversity, even in the face of armed conflict. There are five ways that we help to make this happen: Child protection – providing safety from armed conflict Education – improving access to relevant, quality education Psychosocial – offering support to regain self-esteem and rebuild relationships with friends and families Livelihoods – training in skills and business to offer a real chance at a better future Justice – helping children and young people understand and claim their rights, and access legal assistance and justice procedures |
| International Rescue Committee ¹⁴⁰ | Advancing nurturing care in humanitarian settings: Overview of workshops in Arab countries | There remains a critical need for national and subnational leadership to truly optimize ECD in humanitarian settings, for donors to provide long-term and sustainable ECD funding, and for all relevant actors to work together towards a common ECD vision of supporting children, especially the most vulnerable and those living in crisis settings Lessons learned from workshops: It is important to engage partners regionally and nationally Embed current political planning as the thematic focus of the workshops It is important to build and maintain national ECD "institutions" and task teams There is variable understanding of nurturing care |
| International Rescue Committee ¹⁴¹ | Early Childhood Development at the International Rescue Committee | Investments in early childhood have already been proven to be one of the most effective strategies for improving the long-term economic, health, and social well-being of both individuals and their broader societies By supporting ECD, we can not only mitigate the immediate and long-term damages of conflict and crisis but also empower children to flourish through continued support and nurturing care, no matter where or in what situation |
| ECDAN ¹⁴² | Themes: ECD and Humanitarian Crisis | Key features of ECD interventions in humanitarian settings: Education Child protection Support for parents and caregivers Health Nutrition For infants and young children growing up in crisis contexts, quality ECD can save lives and set the foundations for a more positive life trajectory |
| UNICEF ¹⁴³ | Early childhood development in emergencies | Only a small percentage of humanitarian response plans incorporate ECD interventions –funding is scarce and often limited to short-term surge funding that does not allow programming to be sustained for lasting impact. |



WHO Guideline – Improving Early Child Development

In 2020 the WHO published a Guideline on Improving Early Child Development. The objective of the guideline was to identify ECD-specific interventions and feasible approaches that are effective in improving developmental outcomes in children. The audience for a WHO Guideline includes policy-makers, development agencies and implementing partners, district and sub-national health managers, health workers, and nongovernmental organizations.

The guidelines were based on two systematic reviews that examined key questions about how to improve ECD:

- 1. Caregiving interventions to support early child development in the first three years of life: Report of the systematic review of evidence (Jeong, Franchett & Yousafzai, 2018); and
- 2. Psychotherapeutic interventions for common maternal mental health problems among women to improve early childhood development in low- and middle-income countries: Report of systematic review and meta-analysis of RCTs. ¹⁴⁵

The WHO guideline review process was guided by a series of key questions:

- 1. What is the effectiveness on ECD of *responsive* caregiving interventions in the first 3 years of life?
- 2. What is the effectiveness on ECD of *caregiving interventions that promote early learning* in the first 3 years of life?
- 3. What is the effectiveness on ECD of caregiving interventions to support socio-emotional and behavioural development in the first 3 years of life?
- 4. What is the effectiveness on ECD and child growth outcomes of *integrated caregiving and nutrition interventions* in the first 3 years of life?
- 5. What is the role of *supporting maternal mental* health on ECD outcomes?

Based on the reviews and expert deliberations, the following recommendations were made (see Figure 17):

- 1. Responsive caregiving interventions: A total of 17 studies were identified demonstrating benefits to children and caregivers. A significant challenge was the wide application of responsive caregiving definitions and confusion with early learning.
- 2. Caregiving interventions that promote early learning: The evidence for caregiving interventions to promote early learning was derived from 22 RCTs, the majority of which were conducted in HICs. A key challenge is the wide application of definitions of the early learning component of nurturing care, which has not been consistently operationalized.
- 3. Caregiving interventions to support socioemotional and behavioural development:
 Ten studies were identified with caregiving interventions to support healthy socio-emotional development and behaviour for children during the first 3 years of life. All were conducted in HICs. In the case of this question, the Guideline Development Group declined to make a recommendation.
- 4. Integrated caregiving and nutrition interventions:
 A total of 18 studies combining caregiving and nutrition interventions were identified. All 18 studies were conducted in LMICs.
- Supporting maternal mental health: The systematic review found improvements in the severity of depressive and anxiety symptoms experienced by women in the perinatal period, but limited evidence was found for ECD outcomes.

Figure 17: WHO Guideline: Improving early childhood development

RECOMMENDATIONS

In order to improve early childhood development, WHO recommends:

1 RESPONSIVE CAREGIVING

All infants and children should receive responsive care during the first 3 years of life; parents and other caregivers should be supported to provide responsive care.

Strength or recommendation: Strong Quality of evidence: Moderate (for responsive care)



2 RESPONSIVE CAREGIVING

All infants and children should have early learning activities with their parents and other caregivers during the first 3 years of life; parents and other caregivers should be supported to engage in early learning with their infants and children.

Strength or recommendation: Strong Quality of evidence: Moderate (for early learning)



3 INTEGRATE CAREGIVING AND NUTRITION INTERVENTIONS

Support for responsive care and early learning should be included as part of interventions for optimal nutrition of infants and young children.

Strength or recommendation: Strong Quality of evidence: Moderate



4 INTEGRATE CAREGIVING AND NUTRITION INTERVENTIONS

Psychosocial interventions to support maternal mental health should be integrated into early childhood health and development services.

Strength or recommendation: Strong Quality of evidence: Moderate





Scoping of the literature

The search was confined to post-2015 because Jeong and colleagues (see below) had conducted a comprehensive systematic review for the World Health Organization guideline *Improving Early Childhood Development*,. The publication of a WHO guideline is a strong indicator of the research maturity of the field and the level of evidence produced to date. For this review, we were interested in broad lessons learnt from evaluations of programs, and new approaches to understanding the evidence. We chose a brief narrative review¹⁴⁶ for a number of reasons:

- 1. The main aim of this report is not a Cochranestyle systematic review, but rather to engage existing work for the purpose of deriving what learning is available, rather than providing an evidence-based answer to a single empirical question¹⁴⁷
- The full systematic reviews commissioned by the World Health Organization for the 'Improving early childhood development' Guideline¹⁴⁸ had effectively surveyed all relevant literature until 2016
- 3. Time and resource constraints for a full systematic review

In terms of search strategy, we searched four online databases: PubMed, EBSCOHost, the Cochrane Database of Systematic Reviews and the Campbell Collaboration. Search terms included

("early childhood development" OR "cognitive development" OR "language") AND ("parent*" OR "parent* sensitivity" OR "responsive caregiving" OR "responsive parent*" OR "sensitive parent*" OR "responsive care" OR "parent child relation*" OR "mother child relation*") OR ("childrearing practices" OR "parent child communication") AND ("psychosocial stimulation" OR "stimulation intervention*" OR "stimulation") AND ("review" OR "meta-analysis") AND ("low - and middle- income countr*" OR "low resource setting*" OR "task shifting" OR "task sharing").

Key takeaways from reviews

Perhaps the key takeaway from the review is that evidence-based early childhood development (ECD) programs that strengthen nurturing care, promote early stimulation, and target caregiving behaviour and learning opportunities have been shown to be effective in improving the early development of children, especially among vulnerable populations.

High quality, robust evidence is needed to determine effectiveness of programs and inform further implementation. In studies, there was high heterogeneity in measures used to assess outcomes. There is also a need to use valid, reliable, and similar measures to determine outcomes so that evidence-based recommendations can be made.

Table 3: List of reviews

| Review | Reference | No. of papers per review | Key takeaways |
|--|---|---|--|
| 2023 ¹⁴⁹ Katague, M., Pacheco, M. F., & Perez-Escamilla, R. (2023). Pathways to scale up early childhood programs: A scopi review of Reach Up and Care for Child Development. <i>PLOS Glob Public Health</i> , 3(8), e0001542. doi:10.1371/journa | 5 | 75 papers, 33 programs | <u>Aim</u> : Review evidence of Reach Up and CCD interventions. |
| | Pathways to scale up early childhood programs: A scoping review of Reach Up and Care for Child Development. <i>PLOS</i> | | <u>Takeaways</u> : Evidence-based ECD programs that strengthen nurturing parenting skills and promote early stimulation may interrupt cycles of intergenerational poverty. Implementation of ECD programs varies globally – need to use context and evidence-based planning to successfully implement. |
| | ργριι.υυυ1342 | | Recommend using the ECD Implementation Checklist for Enabling Program Scale Up to guide decision-making regarding context and implementation strategies. |
| Carr et al., 2020 ¹⁵⁰ | | 18 papers, 550 studies (review of reviews) | Aim: Determine the outcomes for individuals exposed to severe neglect in congregate care institutions such as orphanages. In this context, severe neglect refers to failure to meet children's basic physical, developmental, and emotional needs due to inadequate resources. |
| | | | Review of reviews, systematic reviews, and meta-analyses were relatively well designed, which encouraged confidence in their results. |
| | | | <u>Takeaways</u> : Policies to ensure facilities are adequately resourced to meet children's developmental needs. Early placement in adoptive or foster families, with access to routine physical and mental healthcare services available in developed countries, are the most viable effective intervention for child survivors of severe neglect. |
| 2023 ¹⁵¹ C. B., N Edmor N. (202 childhe interve healthe cognit at 0-36 review Dis Ch doi:10. | Hirve, R., Adams, C., Kelly, C. B., McAullay, D., Hurt, L., Edmond, K. M., & Strobel, N. (2023). Effect of early childhood development interventions delivered by healthcare providers to improve cognitive outcomes in children | 97 papers, 42 trials | Aim: Determine the effect of early childhood development interventions delivered by healthcare providers (HCP- ECD) on child cognition and maternal mental health. |
| | | | First systematic review and meta-analysis that has examined the impact of HCP-ECD interventions across HICs and LMICs |
| | at 0-36 months: A systematic review and meta-analysis. <i>Arch Dis Child</i> , 108(4), 247-257. doi:10.1136/archdischild-2022-324506 | | <u>Takeaways</u> : Promising evidence, particularly for cognitive and motor outcomes, of the effect of HCP-ECD interventions. However, effect sizes were small, and the certainty of evidence ranged from very low to moderate. Additional high-quality research is required. |

| Review | Reference | No. of papers per review | Key takeaways |
|--|---|--|---|
| Ip et al., 2017 ¹⁵² Ip, P., Ho, F. K. W., Rao, N., Sun, J., Young, M. E., Chow, C. B., Hon, K. L et al. (2017). Impact of nutritional supplements on cognitive development of children in developing countries: A meta-analysis. <i>Sci Rep</i> , 7(1), 10611. doi:10.1038/s41598-017-11023-4 | J., Young, M. E., Chow, C. B., Hon, K. L et al. (2017). Impact of nutritional supplements on cognitive development of children in developing countries: A meta-analysis. <i>Sci</i> | 48 studies, 67 interventions | Aim: Aimed (1) to determine whether nutritional supplements provided to pregnant women or young children could improve cognitive development of children in developing countries, and (2) to explore how supplementation characteristics could improve children's cognitive outcomes. |
| | | Takeaways: Childhood nutritional supplementation was beneficial to cognitive development but could be optimized by providing multiple nutrients; antenatal supplementation should target pregnant women in the first trimester for better cognitive benefits. Further studies needed to determine optimal supplementation. | |
| Jeong et al., 2022 ¹⁵³ | Jeong, J., Bliznashka, L., Sullivan, E., Hentschel, E., Jeon, Y., Strong, K. L., & Daelmans, B. (2022). Measurement tools and indicators for assessing nurturing care for early childhood development: A scoping review. <i>PLOS Glob Public Health</i> , 2(4), e0000373.doi:10.1371/journal.pgph.0000373 | 239 articles | Aim: While there has been increasing attention in global public health towards designing and delivering programs, services, and policies to promote nurturing care, measurement has focused more on the components of health and nutrition, with less attention to early learning, responsive caregiving, and safety and security. We conducted a scoping review to identify articles that measured at least one nurturing care outcome in a sample of caregivers and/or children under-5 years of age in low- and middle-income countries (LMICs). |
| | | | Takeaways: Great variability in measures and indicators used. Additional research needed to establish the most optimal measures and indicators for assessing nurturing care, especially for early learning and responsive caregiving. Provides comprehensive overview of current state of measurement in the field. There is a need for more research and guidance regarding the most valid and reliable measures, appropriate scoring methods, and standardized reporting of indicators for nurturing care. |
| Jervis et al., 2023 ¹⁵⁴ | Jervis, P., Coore-Hall, J., Pitchik, H. O., Arnold, C. D., Grantham-McGregor, S., Rubio-Codina, M., Walker, S. P. et al (2023). The Reach Up Parenting Program, Child Development, and Maternal Depression: A Meta-analysis. <i>Pediatrics</i> , 151. | 18 articles | <u>Aim</u> : Synthesize impact of the Reach Up early childhood parenting program in several lowand middle-income countries and examine moderation by family and implementation characteristics. |
| | | | Takeaways: Reach Up benefits child development and home stimulation and is adaptable across cultures and delivery methods. Child and implementation characteristics modified the effects, which has impacts for scaling. |

| Review | Reference | No. of papers per review | Key takeaways |
|---|--|--|--|
| Art Review: Poverty and the Developing Brain. <i>Pediatrics</i> , | Noble, K. G. (2016). State of the Art Review: Poverty and the | | <u>Aim</u> : Summarize research on the relationship between socio-economic status and brain development |
| | 137(4). doi:10.1542/peds.2015- | | <u>Takeaways</u> : To meaningfully improve child health at the population level, child health professionals must invest in efforts to reduce socio-economic disparities in health and achievement. |
| Lane et al., 2022 ¹⁵⁶ Lane, H., Harding, S., & Wren, Y. (2022). A systematic review of early speech interventions for children with cleft palate. Int J Lang Commun Disord, 57(1), 226-245. doi:10.1111/1460 | 7 papers | Aim: To review the evidence for the effectiveness of interventions targeting speech, delivered in the first 3 years of life for children with CP±L, and discuss factors such as intervention type, facilitator, dosage, outcome measures, and the age of the child. | |
| | 6984.12683 | | Takeaways: Early naturalistic interventions can have positive impacts on the speech development of children with cleft palette with or without cleft lip (CP±L). But methodological quality of studies was weak and lacking in clarity and specificity in terms of intervention characteristics. Future research should use more robust methodological designs. Early intervention is key. |
| Little et al., 2021 ¹⁵⁷ | Little, M. T., Roelen, K., Lange, B. C. L., Steinert, J. I., Yakubovich, A. R., Cluver, L., & Humphreys, D. K. (2021). Effectiveness of cash-plus programmes on early childhood outcomes compared to cash transfers alone: A systematic review and meta-analysis in low- and middle-income countries. <i>PLoS Med</i> , 18(9), e1003698 doi:10.1371/journal.pmed.1003698 | 17 studies, 11 included in meta-analysis | Aim: This study examined whether cash-plus interventions for infants and children <5 are more effective than cash alone in improving health and well-being. |
| | | cash-plus programmes on early childhood outcomes compared to cash transfers alone: A systematic review and meta-analysis in low- and middle-income countries. <i>PLoS Med</i> , 18(9), e1003698 doi:10.1371/ | Takeaways: Cash combined with food transfers and primary healthcare show the greatest signs of added effectiveness. More research is needed on when and how cashplus combinations are more effective than cash alone, and work in this field must ensure that these interventions improve outcomes among the most vulnerable children. Significant variation in impact, limited number of studies, therefore more research needed. |
| Nelson et al., 2023 ¹⁵⁸ Nelson, P. M., & Demir-Lira, O. E. (2023). Parental cognitive stimulation in preterm-born children's neurocognitive functioning during the preschool years: A systematic review. Pediatr Res. doi:10.1038/s41390-023-02642-x | Lira, O. E. (2023). Parental | 8 studies | <u>Aim</u> : Examines the literature on parental cognitive stimulation in relation to pretermborn children's neurocognitive outcome. |
| | | <u>Takeaways</u> : Findings suggest that parental cognitive stimulation matters for pretermborn children's neurocognitive performance. Future experiential models should examine the mechanistic roles of cognitive stimulation in relation to narrowed neurocognitive outcomes to better inform possible prevention and intervention efforts. | |

| Review | Reference | No. of papers per review | Key takeaways |
|--|--|---|--|
| O'Toole et al., O'Toole, C., Lee, A. S., Gibbo F. E., van Bysterveldt, A. K., & Hart, N. J. (2018). Parentmediated interventions for | & Hart, N. J. (2018). Parent- mediated interventions for | 3 studies | <u>Aim</u> : To assess the effects of parent-mediated interventions for improving communication and language development in young children with Down syndrome. |
| | promoting communication and language development in young children with Down syndrome. <i>Cochrane Database Syst Rev,</i> 10(10), CD012089. doi:10.1002/14651858. CD012089.pub2 | | <u>Takeaways</u> : Few studies, and of low quality. Need for well-designed studies, including RCTs, to evaluate the effectiveness of parent- mediated interventions. Need to use valid, reliable and similar measures. |
| Osorio et al., 2019 ¹⁶⁰ | Osorio, A. A. C., & Brunoni, A. R. (2019). Transcranial direct current stimulation in children with autism spectrum | in trum ping urol, | Aim: To review available studies which test transcranial direct current stimulation (tDCS) to reduce symptom severity in children with autism spectrum disorder (ASD). |
| | disorder: a systematic scoping review. <i>Dev Med Child Neurol</i> , 61(3), 298-304. doi:10.1111/ dmcn.14104 | | <u>Takeaways</u> : Preliminary evidence is encouraging of the potential usefulness of tDCS for treatment of ASD in children and adolescents. The evidence is sparse and of low quality, so the true effect may be different. Future randomized controlled trials are needed. |
| Palomares- Aguilera et al., 2021 ¹⁶¹ | Palomares-Aguilera, M., Inostroza- Allende, F., & Solar, L. R. (2021). Speech pathology telepractice intervention | ilera et al., Inostroza- Allende, F., & Solar, 1 ¹⁶¹ L. R. (2021). Speech pathology | Aim: Systematic review of the use of telepractice during the COVID-19 pandemic for providing speech pathology interventions for Spanish-speaking children with cleft palate. |
| | during the COVID-19 pandemic for Spanish-speaking children with cleft palate: A systematic review. <i>Int J Pediatr Otorhinolaryngol</i> , 144, 110700. doi:10.1016/j.ijporl.2021.110700 | | <u>Takeaways</u> : Audiovisual materials seem to be extremely useful for families receiving the interventions. However, systematic review itself is limited in its methodology and thoroughness, due to timespan and small team. |

| Review | Reference | No. of papers per review | Key takeaways |
|---|---|-----------------------------|---|
| 2019 ¹⁶² K., Bettencourt, K N., & Shankar, A. H | Prado, E. L., Larson, L. M., Cox, K., Bettencourt, K., Kubes, J. N., & Shankar, A. H. (2019). Do effects of early life interventions | 75 studies | Aim: To assess whether effects of interventions on linear growth are associated with effects on developmental scores and to quantify these associations. |
| | on linear growth correspond to effects on neurobehavioural development? A systematic review and meta-analysis. Lancet Glob Health, 7(10), e1398-e1413. doi:10.1016/S2214-109X(19)30361-4 | | Takeaways: In nutritional supplementation interventions, improvements in linear growth were associated with small improvements in child development, whereas nurturing and stimulation interventions had significant effects on child development but no effects on linear growth. To nurture thriving individuals and communities, interventions should specifically target determinants of neurodevelopment and not simply linear growth. |
| | | | Supporting thriving individuals and communities requires interventions targeting caregiving behaviour and learning opportunities that support cognitive, language, motor, and socialemotional skills. |
| Rutherford et al., 2020 ¹⁶³ | | 34 studies | Aim: Scoping literature review together with a qualitative evaluation with parents and professionals. |
| | | | Takeaways: VS have been used successfully; however the number and quality of studies limits the possibility of drawing strong conclusions. Propose consensus with terminology and implications for practice and research. |
| | | | Need for large scale research. |
| Seager et al., 2022 ¹⁶⁴ | | 11 studies | Aim: Review existing early speech, language and communication interventions for young children with DS from birth up to 6 years, and investigate their effectiveness in improving speech, language, and communication outcomes in children with DS. |
| | | | <u>Takeaways</u> : Need high quality evidence (heterogeneity in measures, limited number of studies, quality of studies). |
| | | | However, interventions that have high dosage, focus on language and communication training within a naturalistic setting, and are codelivered by parents and clinicians/researchers may have the potential to provide positive outcomes for children with DS between 0 and 6 years of age. |

| Review | Reference | No. of papers per review | Key takeaways |
|--|---|-----------------------------|---|
| Shah et al., 2022 ¹⁶⁵ Shah, R., Camarena, A., Park, C., Martin, A., Clark, M., Atkins, M., & Schwartz, A. (2022). Healthcare-Based Interventions to Improve Parenting Outcomes in LMICs: A Systematic Review and Meta- Analysis. Matern Child Health J, | | 8 articles | Aim: Assesses the effectiveness of healthcare-based ECD interventions in LMICs on the following key evidence- informed parenting outcomes affecting ECD: (1) responsive caregiving (2) cognitive stimulation and (3) parental mental health. Impacts on parental knowledge regarding ECD and parenting stress were also assessed. |
| | 26(6), 1217-1230. doi:10.1007/ s10995-022-03445-y | | Takeaways: Small number of studies, high heterogeneity, variability in measures used for outcomes and timing of assessments. Need further research. Statistically significant effects of healthcare-based interventions in LMICs on improving key evidence-based parenting outcomes and offers one promising strategy to support children in reaching their full developmental potential. |
| Zhang et al., 2021 ¹⁶⁶ | Zhang, L., Ssewanyana, D., Martin, M. C., Lye, S., Moran, G., Abubakar, A., Malti, T. et al (2021). Supporting Child Development Through Parenting Interventions in Low- | 21 trials | Aim: Review the evidence base of parenting interventions comprising stimulation and responsive caregiving components on developmental outcomes for children under age 2 years in low- and middle-income countries. |
| An U Fron | to Middle-Income Countries: An Updated Systematic Review. Front Public Health, 9, 671988. doi:10.3389/fpubh.2021.671988 | | Takeaways: Parenting interventions that encourage nurturing care are effective in improving the early development of children, especially among vulnerable populations. Effect sizes varied greatly. Whilst certain intervention characteristics improve program effectiveness, there is still further research needed. |

Common elements approach

As has been outlined above, there is now an extensive evidence base showing the effectiveness of interventions to improve development in the early years and beyond. However, there are gaps in how we understand these interventions to work.

Content and delivery strategies may vary substantially,¹⁶⁷ and different interventions also contain a variety of elements that in one way or another are theorized to drive the same outcomes. Psychosocial interventions often include a multitude of elements (parenting skills, relaxation, modelling,

positive attention) with little clarity about which components are in fact contributing to outcomes. In addition, most of the evidence on early childhood interventions is from high-income countries. In There is increasingly a move away from purely testing effectiveness to a focus on identifying the necessary and sufficient components for effective early interventions It (see Figure 18). In this approach key intervention components (common elements), are matched to circumstances of the child, context, or level of facilitator expertise, to improve outcomes. It is olating "active" ingredients of interventions could help reduce overlap across a saturated programming field and build consensus about what works.

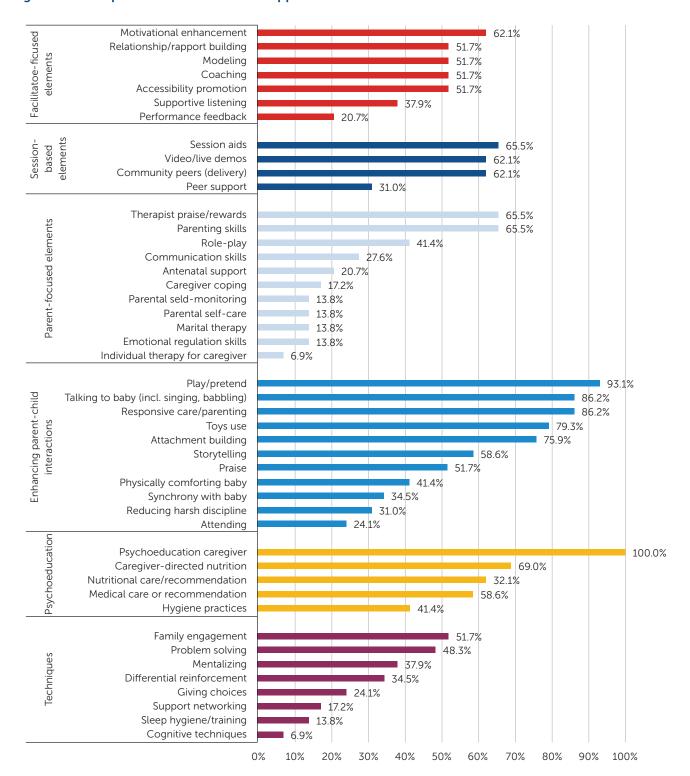


Figure 18: Example of common elements approach

Source: Mamedova et al, in press



Stakeholder interviews

Lessons learned

Between June and September 2023, we interviewed a total of 17 participants and stakeholders. They included leading academics and researchers in the field, UN agency representatives, and experts in financing and health policy.

The trajectory of the Early Childhood Development field

There was wide agreement among respondents that the global Early Childhood Development (ECD) field has expanded exponentially in the last decades, with a proliferation of research, policies, and programs.. Interviewees reported that key enablers for this growth have included its prioritization by multilateral organizations such as the World Health Organization (WHO); the establishment of intersectoral partnerships internationally and nationally; the increased foci of national ministries of health and education; and the robust scientific evidence for ECD interventions. Major milestones were noted, including the Lancet series on Early Childhood Development (2016), the inclusion of ECD in the Sustainable Development Goals (2015), the World Health Assembly Resolution on Early Childhood Development (2010), and the development of the Nurturing Care Framework (2018).

From a public health perspective, the increase in infant and child survival was noted as a particular success. The development of preschool interventions was reported to have made significant progress, while domains such as parenting, childcare, child protection, and disability support are lagging behind in terms of development and practice. Respondents described the momentum and growing commitment to address ECD challenges globally in the period before the COVID-19 pandemic. They also reported that commitment is now flailing, due to financial challenges and the weakening of multilateralism. Key challenges relate to financing of ECD for LMICs and coordination for national implementation. These are hindering the reach and quality of ECD programming for the most vulnerable children.

KEY TAKEAWAYS

- Notable outcomes in the ECD field in recent decades include the increase in infant and child survival, along with the proliferation of preschool interventions
- The translation of science for advocacy has played an important role in advancing the field
- Multilateral leadership has been instrumental in growing the field, as has the fostering of intersectoral collaboration

The role that science has played as an advocacy tool

Several respondents noted the important role that science, particularly neuroscience, has played as an advocacy tool to catalyze interest in and support for ECD.

The one that stuck the most was neuroscience. I mean, it really had a fascination. Everyone heard it and said, "Wow!" Because people care about being smart. Brains matter." – Policymaker

Evidence-based advocates at the multilateral organizations (WHO, UNICEF and World Bank) have reportedly contributed to embedding neuroscience into the global ECD discourse by translating it for national ECD policymakers. This advocacy has resulted in productive dialogues on child development at the highest level in ministries of education, health, and social protection. However, a respondent reflected that the neuroscience evidence started to diminish in its utility as an advocacy tool as the need for implementation science became more apparent.

That neuroscience argument didn't get refreshed. It sort of stayed 20 years old at the turn of the century... We should have either stayed with neuroscience or we should have brought in other scientific evidence that was not for advocacy, but for implementation. And we should have strengthened the implementation science part, which we didn't quite do." – Researcher

Multilateral leadership

A number of respondents pointed to the important role that multilateral organizations, particularly UNICEF, the World Health Organization (WHO) and World Bank, have played in framing and building global governance for ECD. These efforts have been instrumental in consensus-building, which has led to priority-setting for ECD in SDG 4.2 and the development of policy instruments, including the Nurturing Care Framework (NCF) in 2018. Some believe that the NCF has a wide scope for interpretation, and respondents felt that it brings the right actors together, enabling the expression of a unified goal to improve the lives of children globally.

The Nurturing Care Framework really was the centrepiece of that—bringing the science into the public view and actually influencing policy." — Researcher

Respondents referred to the central role that the World Health Organization (WHO) has played in consensus-building, the development of guidelines, sponsoring research, and setting up working groups to guide implementation. They identified important achievements, including the decision made at the World Health Assembly in 2018 for health ministries to take responsibility for parenting programs, and the positioning of ECD research, policy, and practice as a responsibility of the health sector. The creation of the Early Childhood Action Network (ECDAN) and its associated regional networks was also noted as a major success as a space for researchers, advocates, and policymakers to work together to drive the ECD agenda.

"It was unheard of, for example, for WHO, UNICEF, and the World Bank to all agree on a particular priority in this area at the same time So, it was always very scattered and uncoordinated action.... And that's been the biggest development in global work in the field." – Researcher

These developments have reportedly led to the following positive changes in ECD financing:

- 1. A gradual shift for national governments to budget ECD from the fiscus, rather than with off-budget financing
- 2. The influence of United Nations agencies as a conduit for donor funding, impacting on the priority of ECD in LMICs
- 3. Multilateral funders such as the World Bank and the Global Partnership for Education working directly with governments in LMICs, paying attention to plans and outcomes
- 4. Multilateral funders working with a wider range of geographies
- 5. Sustainable financing for regional ECD networks

Despite these developments, one respondent noted that the trajectory of ECD on the international agenda has not been constant, due to changes in the foci of international agencies. There was agreement among respondents that the strength of multilateralism has declined in recent years, with the fracturing of the geopolitical landscape. UN agencies are seen by many as being less powerful, as political commitment to international cooperation declines.

Critique of the Nurturing Care Framework

Although many respondents viewed the publication of the NCF in 2018 as a pivotal point in cooperation for ECD globally, the interviews bore some criticism of the framework. One respondent reflected that the NCF does not support country-level implementation, fundraising, governance, or program strengthening because it is too much of a 'catchall' concept, with an overwhelming scope.

Most countries cannot do everything. It's a good catchphrase and it's a good checkbox and it's a good word to have in a report if you're doing a review and seeing how many times nurturing care is mentioned. It doesn't unpack what it actually is. Most policymakers don't have the bandwidth to wait for you to unpack it. Most people honestly can't even explain it to you. They just say, 'nurturing care,' expecting everyone to understand what's going on." – Researcher

One of the reported stumbling blocks for the implementation of the NCF is the challenge of coordinating between the functions of health, education, nutrition, and child protection.

Response to the polycrisis

There was widespread agreement amongst respondents (and mirrored in the literature) that COVID-19 and the corresponding economic downturn has led to substantial learning setbacks in the health, development, and learning opportunities for children, offsetting most of the improvements that had been achieved in previous years. However, the polycrisis also generated opportunities to strengthen support for improving ECD, some of which unfortunately have been missed. Specifically, the pandemic was described as a missed opportunity to advance the parenting agenda.

COVID-19 opened up a new opportunity –the era of parenting. Parents were the first-line responders. But we got mired in 'what sorts of parenting? For whom? For what?' And we didn't have the leaders who were able to capture the imagination of the world in the new polycrisis to be able to take it forward." – Policy expert

Some respondents believed that leaders in the field have not sufficiently leveraged the decline of multilateralism as an opportunity to identify the drivers of change in-country and to advocate

governments to strengthen their own population in this new era. There was broad agreement that the polycrisis is diverting attention away from early childhood, and that the emphasis for many actors has reverted to 'survival,' rather than renewing a commitment to 'thriving'. There is therefore an urgent need to amplify the advocacy for ECD. One respondent argued that a narrative should be crafted demonstrating the importance of ECD in early human capital development to addressing urgent problems such as climate breakdown. This argument was reportedly successful for the inclusion of early childhood development in SDG 4.2 in 2014.

The broad narrative will be that we need to double down on investments in human capital because it's going to be people who get us out of this situation, not technology. It's going to be people's behaviours, people's adaptability. And to have that, people need to have the knowledge to act." – Health policy expert

Additionally, there was a proposition to use shorter-term arguments to advocate for ECD. For example, the pandemic experience should be used to shine a light on the relationship between childcare and gender equity, demonstrating how quality, subsidized care enables mothers to re-enter the workforce. Some respondents believed that it is now time to bring funders, implementers, and researchers together to evaluate the state of the field within the current environment, with a view to establishing a refreshed agenda so that funding is aligned with countries' needs and that evidence exists for advocacy and financial motivation.

Transdisciplinary/intersectoral collaboration

Respondents cited the significance of increased global collaboration between actors in health, nutrition, social protection, and education, exemplified by the collaboration to develop the NCF. At a national level, there has been a growing adoption of responsibility by ministries of health and

education for ECD, which has led to the drafting of ECD legislation and corresponding budget allocations. Some governments are assembling multisectoral committees, indicating an increased commitment to address ECD holistically. In some African countries, there are newly established ministries of ECD.

The importance of strong political leadership at a national level was highlighted, exemplified by the previous president of Chile, Michelle Bashelet, who created the intersectoral Chile Crece Contigo ECD program. Latin America is seen as a policy leader in ECD within the global South. This is associated with strong intercountry collaborative momentum due, in part, to countries' strong identification as part of a regional collective.

And so there is a natural inclination to learn from each other. There's quite a bit of influence. When one country does something, there are some ripple effects."—
Economist

However, although there is increased collaboration among sectors, several respondents warned that the field is 'fraught with politics.' For example, there is a reported tension between public health actors seeking universally applicable interventions, and the 'sidelined' cultural anthropologists who believe that cultural differences should have an important bearing on the development of interventions.

Integration of nurturing care into primary care

For every complex problem there is an answer that is clear, simple, and wrong."

– H. L. Mencken

Integrating interventions to improve early child development into the primary care system is somewhat of a 'holy grail' in the ECD field. The last 5-10 years has seen two major RCT initiatives in this

regard. The first is the SPRING for MDGs (Sustainable Program Incorporating Nutrition and Games), a seven-year research program funded by the Wellcome Trust. The aim of SPRING was to develop an integrated strategy to reduce child deaths and improve child growth, nutrition, and development. Implementation took place in India and Pakistan – there was no impact on ECD outcomes or growth in either setting.¹⁷⁵

The second RCT was conducted in Siaya County, western Kenya and involved integrating ECD into routine facility- and home-based health services in four sub-counties. While the outcome paper from this trial has not been published, it is known to have failed to improve primary outcomes. These negative findings may have significant implications for the ECD field, given the extent to which funders and governments may be inclined to conclude that integration is not possible.

Uncritical use of evidence

Some participants expressed concern regarding the way in which evidence from HICs is often applied uncritically to LMICs.

You'll get the largest benefits for the poorest kids. Well, that's your poorest kids, not our poorest kids, I'm afraid. If the situation is so bad, you won't get anything. Because when the situation is so bad in other domains, you just won't get a return." — Economist

Specifically, they cited the way in which the research and conclusions of Nobel laureate economist James Heckman have been used in both HICs and LICs. The entire Heckman model is predicated on two things:

- 1. The savings one gets on future spending by investing in the early years
- 2. The structural conditions are not so adverse as to ensure that benefits do not accrue

Essentially the model is that we're basically borrowing off the future. We're spending a dollar now to save seven to ten later. And how have you estimated this? And they said, well, look at the evidence from the United States. But the calculations in the Heckman model are based on inefficient spending on health care and prison systems in the United States later on in life. The reason the U.S. saves a lot of money is because it spends too much on those." – Economist

A number of respondents stated that they believed that the Heckman model has perhaps 'outgrown its usefulness.'

Scaling narrow interventions

Linked to the points about Heckman's model and about scaling and integrating ECD into primary care was the widespread practice of assuming that narrow interventions that have been shown to be effective in tightly controlled RCTs would immediately be successful when implemented within a whole health system, without consideration of diverse social and structural challenges.

That is like putting flour in the oven and expecting a cake. If you have presented it as this thing in the sort of Heckman way - that you can invest in this thing and you will, no matter how badly off the child is, get these high returns – then it's a risk." – Economist

KEY TAKEAWAYS

- Integrating ECD interventions into primary care systems is complex and will require significant system transformation before it is likely to succeed
- Trying to scale up effective interventions is unlikely to succeed unless the structural context is also improved, thus scaffolding narrow interventions
- Evidence and investment models developed in HICs must be carefully scrutinized with a critical eye before they are used globally as either models or justification

Humanitarian settings and migration

Every child in every refugee camp in the world wants to be a doctor. What they mean is they want to make things better."

– AA Gill

In recent years, there has been a steep rise in forced migration. Several respondents anticipated that this trend will continue. According to a respondent, although the international humanitarian system has several 'ad hoc' mechanisms to support people in humanitarian crises, there is no delivery system to buffer people from the effects of poverty and environmental disruption by reacting quickly and effectively to crises. Refugee situations often extend for several years, affecting an entire childhood. What is needed, according to one respondent, is the development of models for both acute and prolonged crises, including components of education, health, nutrition, shelter, and thriving that apply to all children from early childhood to adolescence.

KEY TAKEAWAYS

- Forced migration will continue to increase in the next decade
- There is a need to build models for ECD programming for complex situations involving humanitarian architecture, a host government system, and arriving migrant cultures
- There is a moral imperative to care for children in humanitarian and migrant contexts

Child protection - "Invisibility of social protection"

Child protection was described as a particularly weak issue politically, with states rarely taking initiative on it. Nationally, the budgets for child protection are described as 'tiny.' One respondent cited the reason for underinvestment as being that children requiring protection are the least politically empowered and most marginalized: many live on the streetsor come from impoverished families that may be affected by substance abuse and associated stigma. They are viewed as the 'undeserving poor.'

When we talk about child protection, we're talking about just about the least empowered, most vulnerable, most at risk, politically weakest segments of society. I mean, the children on the streets, the children who are trafficked, child labour, children in the homes who are being abused."

- Political scientist

Globally, the child protection sector is reportedly embroiled in policy conflict regarding deinstitutionalisation and other "relatively minor disputes," which is scuppering political action.

The global child protection community, or whatever they want to call themselves, has hampered its authority and political power by being embroiled in policy disagreements that divert their energy away from collective action and toward internal policy fights." - Political scientist

On the one hand, there is criticism that the issue is donor-dominated, with little appreciation of local cultural nuance. On the other hand, there is concern that if the donor community does not act, states will not prioritize the issue. UNICEF is reportedly driving the agenda for child protection and offering financial incentives. One respondent noted that states are slowly being 'won over' on the issue, although more effort is needed and civil society should be more active in its advocacy efforts.

It was suggested that in order to convince governments to take more action on child protection, an alliance should be created, with UNICEF as its leader and including heads of states, national departments of social affairs, heads of finance, parliamentarians, and motivated grassroots actors. Success of such a would depend on national political interests and the power it confers to prevailing governments. It was reported that this model is currently achieving some success in Cambodia where there are high levels of child trafficking and sexual exploitation.

Childcare

Childcare is considered a relatively new area of focus for the global ECD community, driven by increases in maternal employment worldwide. According to some respondents, international organizations and academics currently know little about the characteristics of childcare globally and how its quality could be improved. There appears to be little coverage of childcare in LMICs, and its quality is lower than that of pre-primary education. Childcare centres usually operate in the informal sector, where childcare is provided by family and

community members. In many countries, there is little training, no oversight, and no basic standards of safety, health and hygiene. One reported challenge is that childcare is viewed as unimportant, because it is not 'educational'

I've been at meetings where people get very precious about this. 'But that's not educational!' As if there could be any form of childcare that would be useful or helpful for parents or beneficial for children that wasn't also looking at their development." – Researcher

Some argued that in order for childcare to be prioritized, it is essential for it to be reframed within the context of women in the economy and gender transformation.

Unless childcare can be reframed within the economic transformation of gender, we're not going anywhere, it's a point of stasis." – Researcher

Respondents agreed that there are many key areas that need to be developed in the childcare sector, including the development of adequate compensation models and training.

Disability

According to a number of respondents, the area of disability and ECD is particularly poorly developed. For some, this is due to the belief in a number of contexts that children with a disability cannot learn, and so they are excluded from preschools. There is a need to build awareness among caregivers of the potential for children with disabilities. There are some positive models of inclusion for children with disability in LMICs of which reviews have been conducted, althoughone respondent noted that further research is needed to explore successful models of disability inclusion in LMICs and identify strategies for integrating disability perspectives into ECD initiatives (for instance, the development of

legislation and professional development systems to upskill community-based workers to support families).

Sometimes we set up very good programs, ECD intervention programs, but then we don't reach those who are most in need because they're not visible or they are forgotten, or they are in places that are hard to reach. And some of these communities are children with disabilities or children living in highly disadvantaged settings, like in pastoralist settings where their families keep moving around." – Academic researcher

KEY TAKEAWAYS

- Children with disabilities have been forgotten and are to a large degree invisible
- Attempts at inclusive education have not been successful
- A consortium of funders is required to build out this area with a long-term view (10-20 years)

Framing and definition

It is the fate of children to be waiting. They are waiting to become adults; to mature; to become competent; to get capabilities; to acquire rights; to become useful; to have a say in societal matters; to share resources. The list is potentially long of the characteristics that children are putatively lacking but eventually will acquire as time passes." (109)

The complex and incoherent framing of ECD is viewed by some as problematic, presenting a barrier to policy and investment. The term 'early childhood development' has various uses,

including as a shorthand for a developmental process, a developmental outcome, for nurturing care, and even for a place (e.g., a creche). Shawar and Shiffman (2017) have argued that a shared and coherent narrative/framing is essential to the progress of the ECD agenda globally. 176 The Frameworks Institute has comprehensively shown that how people think about or "frame" an issue affects their actions and public policy preferences. Research conducted in South Africa¹⁷⁷ illuminated critical gaps between the evidence from current brain and development research and how members of the public and other stakeholders understood and acted on ECD. One example lay in the mismatch between what the science tells us about the foundational importance of pregnancy and early post-natal stages (first 1000 days of life) for later development and the focus of most stakeholders and members of the public, who acknowledged the importance of this period but, when asked what government should fund, immediately seguewayed to pre-school and primary school. Richter and colleagues refer to this as 'aging up'. 178

KEY TAKEAWAYS

- The framing of ECD has a significant influence on intervention development and financing
- There is confusion about the meaning of ECD - as a developmental process, a developmental outcome, nurturing care, or a place
- There is concern that the framing of ECD is Western-dominated
- The attempt to identify critical periods for intervention contributes to a fragmented view of human development
- Early childhood needs to be situated within a life-course perspective that considers the 'whole child'

A fragmented construction of human development

Some respondents blame the perception of ECD as a discrete developmental process for creating a fragmented view of human development. They report a battle for territory between those who have a particular interest in certain 'critical'periods in the life-course and those focused on particular domains of development. There is a 'sway' between the broadening and narrowing of focus of ECD across developmental domains and within the lifespan, with lengthy debates and people 'picking sides.'

One respondent referred to the way in which specialists advocate for the 'part-child':

I call people 'part-child' advocates - advocates for 'part' of the child. So, either some particular aspect of their well-being – their health, education, safety from violence or some particular period of their life – early childhood, adolescence, mid-childhood. So how do you go from 'part child' advocates to 'child' advocates? You think about what is the right mix of services across the life-course that will produce the best outcomes for the child, but then you can also then end up in competition with adulthood." – Economist

A concern was expressed that the framing of ECD can be too broad, impeding the success of advocacy efforts.

I think the other kind of poor communication has been when we say, 'Child development – everything affects child development,' which is true, right? Nutrition affects child development, health, environment, there's a danger of it being everything and nothing. So that's unhelpful when you're trying to say what it is that you actually want. What are the absolute essential things that you want? What are those key interventions that are going to make a difference? And while I get that everything from climate change to (...) should include and address children, it's not particularly useful." – Researcher

One respondent was also concerned that the child was being viewed as an isolated focus of intervention separate from its family context, leading to policies and interventions that do not prioritize the natural unit of the family as an enabling environment for development.

The child being the focus in the way in which I think a lot of the policy goes – and particularly developmental assistance – is actually quite harmful. It's actually saying, we want to benefit the child. The child is a member of the deserving poor, so we need to find a way to get to them. And we don't want leakage to the family, we want to get this child. And that, I think, is dangerous. And that comes out in that conception of early childhood development too." – Economist

The quest to identify critical moments for discrete, measurable interventions, rather than locating the child within its familial and sociological context, is associated with a donor reluctance to take responsibility for addressing the bigger problem, global poverty.

From an international donor perspective, they particularly can't take on poverty – or they could, but they don't want to. So, they want to limit responsibility. And focusing on a particular thing - a child, a life stage in these sort of Heckman arguments - can be guite damaging. They say 'Well, we've made this lifelong impact from our ten-session program in the first few weeks of life.' I don't have a problem with ten session programs. I think that could be great, but they are one thing that needs to be followed by multiple other things. But if you're trying to limit your responsibility while claiming big impacts, it's a very nice thing to do, to focus on this key window." - Economist

An alternative life-course framing

The same respondent argued that the solution to the tension across the life-course of children should be to adopt the family as the unit of analysis and seek to improve the capacity of those close to the child, while identifying environmental components for children's well-being. This would support the strengthening of families in various ways – for example, by providing mental health care to caregivers, financial assistance, and improved access to services. According to one respondent, there is some move towards a life-course orientation in the field, exemplified by the growth of intergenerational programs and ones which marry the needs of both adolescents and young children.

In line with this life-course framing, another respondent suggested that instead of 'early childhood development,' 'brain health' may be a more useful term, because it implies continuity and an enabling environment for success. There was a suggestion that life-course framing could be linked to multigenerational programs, to leverage adolescents' capacity to contribute to communities and to scale up national policies by engaging young adults in early childhood workforces.

The cultural displacement of ECD interventions

One respondent criticized the prevailing framing of ECD as being too deeply embedded in Western values, which are often disconsonant with other cultures. For instance, the prominent Western focus on developing 'human capital' contrasts with values in East Africa, where the foremost desired outcome of development is social responsibility.

So, what does that mean? If a curriculum were to actually incorporate an emphasis on social responsibility, how does that alter everything – from the kinds of outcomes you're looking at, to the curricula, to standards for quality, to training the workforce? How do we incorporate really specific notions of human development into the program and policy process?" – Researcher

As the Western perspective is most prominent, well-financed, and familiar to international NGOs, interventions developed in Western populations are often adopted and adapted in favour of the creation of culturally-rooted interventions that originate from the specific needs of communities. However, according to the respondent, there is a rising consensus that cultural grounding should be considered at every stage of program and policy development, rather than merely translating materials to ensure that they make sense in the local language. There are some positive models for this -for example, the inclusion of Indigenous perspectives within the national ECD system in Colombia, including the participation of 1101 indigenous language groups and local healers in dialogues on national standards, which has created a nationally-generalizable model.

And I do think that's absolutely where many of the NGOs, funders, advocacy organizations, and regional networks are now challenging some of these more top- down or Western-derived models. And that's a very positive development." – Researcher

The problem of the emphasis on education

One respondent noted that ECD is commonly associated with the image of children in a classroom setting, receiving instructions from a teacher in the 'foundational skills' of literacy and numeracy. This prevailing perception tends to overshadow the importance of the 0-3 childhood settings, such as childcare and the home environment, where 'non-academic' development takes place and innate human relational skills such as empathy, listening, and reflection are learned. The educational focus takes the skills learned in the home environment for granted, even though research has shown that the home environment is more important than the school environment in determining educational

outcomes. This orientation is blamed for the preference of funders to invest in education and the prevalent backloading of investment in LMICs.

We're still in this annoying sort of back and forth with the education folks... about what preschool is for. Say, school readiness. But that's assuming that what the school is going to provide is really what we need for child development, human development, social development overall. There's no good evidence that it's doing its job right now... and that kind of puts a big wedge of the money and the effort and the goodwill into something which I think is broadly unhelpful." – Key informant

Some satisfaction with the framing of ECD

Not all respondents view the framing of ECD as problematic. Some find that the term is useful in describing the scope of the field and see the debate about framing as having limited utility.

I know they keep asking about that. ECDAN did... but everybody knows what this means, and I don't really see the point in changing it now. For me, it refers to early childhood development, which sort of refers to the programs, but I also see it as early child development, which is a child phase. So, we measure early child development, and we deliver early childhood development programs. So, I don't know why not keep it." – Researcher

Some respondents preferred the term 'Early Childhood Care and Education' as it ranges from 0-3 up until the early school years.

I am a big fan of the term' early childhood care and education' or ECCE or whatever you want to call it. The thing I especially like about that term is that it includes care and education together. What I really don't like is when people separate education and care as though they are distinct. Right? I see that a lot. In the U.S., childcare is for zero to three-year-olds, and then early childhood education is for four and five-year-olds. And it's like, all of a sudden, on your third birthday, you're capable of receiving education and you're no longer receiving care. And that just makes no sense to me." – Researcher

Children are often overlooked and seen as unnecessary

A number of respondents, when asked why they felt the rights and needs of children were not seen as sufficiently important in decision-making, stated that one of the reasons was that children are not seen a useful. While conceding that some children are seen as important – usually one's own children or those of close family members – the rest are not treated as important because they're not useful to the country.

Those kids who are not getting enough are not going to be important for the overall development of the country. They're not important for us, so it's charity and so then the charity is based on the extent to which they care. So if we're left at the mercy of how much they care about other people's children, we're not in a great situation because, like you say, they don't... and I really don't think they see them as useful and unless we show that it is actually important for the country then I think we're fighting a losing battle." — Economist

"Short-termism and long-termism"

One respondent described feeling confused about why funders in the field of child development persist in funding short term projects, when they understand the 'unfolding' nature of development across the life-course. NGOs and CBOs are likely to receive funding for a year, or 18 months, or three years if they are lucky. She also stated that this led to a focus on magical solutions to complex problems.

...the kind of short-termism of policy funders and so on is perplexing – this idea that you can have sort of silver bullet interventions that are going to change everything." – Researcher and advocate

When asked about some of the reasons behind the short term nature of so much of the funding, one respondent stated that it had to do with the political economy of the donor community.

There is a political economy, I think, behind this – to be seen to be doing something and then the need for donors to have tangible results and so I think it is saying that the same political economy and factors that drive the other vertical programs are driving this one in terms of the short-termism –the need to see tangible, quick results, to report back to donors. And donors need to report back to their constituencies." – *Multilateral agency*

Financing

Anything we can do, we can afford" – John Maynard Keynes

Respondents reported that the pandemic led to the de-prioritization of ECD financing globally and nationally, with a redirection of resources that have not been reinstated. Concern exists that with all the new priorities and demands on policymakers, children will be 'squeezed out' of the agenda. There is also apprehension that large philanthropic funders are contemplating a shift in their strategic focus, from the first thousand days to preschool. This post-pandemic fiscal pressure is said to be redirecting the focus of ECD policymakers to 'surviving,' rather than considering what is necessary for children to 'thrive' and providing them with essential foundations: including a right to citizenship and access to healthcare, education, and protection. For example, LMICs such as Ghana, which was previously considered an economic 'success story,' are paying more on debt repayment than on healthcare.

More and more of health expenditure is shifting to either private out-of-pocket are or to these insurance-type mechanisms, both of which don't really prioritize early childhoods and children and whether they survive or thrive. The sort of bog standard primary health care systems are getting squeezed." – Health policy expert

'Poor children are a poor investment'

If a happy childhood was proved to be harmful to a prosperous economy, which would we choose?" (Qvortrup, 2004)¹⁷⁹

There was agreement among respondents that there needs to be an increase in investment in poverty reduction and social protection. One respondent highlighted that every day, 17,000 children lose their lives due to poverty and its sequalae. However, this dire situation is not being acknowledged as an urgent matter, nor is it being considered a crisis on par with the response to COVID-19, which involved the raising of \$11 trillion in just over six months. Several respondents argued that financial resources do exist to support basic ECD services for universal coverage in LMICs, through the commitment of a 'fraction' of the GDP of the richest countries. Interventions continue to be tested, often over several years, while countless children are dying and failing to meet their developmental potential.

Some respondents believed that financing institutions are unwilling to address global poverty at a fundamental level, preferring to finance discrete interventions – which is akin to 'putting bandaids on utterly inhumane conditions.' Some also reported that a fragmented view of ECD results in limited appetite for financing intersectorally, and thatthere is also 'short-termism' – the need to demonstrate quick, tangible results to constituencies (such as boards). This creates a preference for siloed interventions, or 'cheap add-ons,' rather than holistic intersectoral programming where 'returns' may be seen 18 years later. The prevailing analogue of an 'investment return' was criticized:

So, when am I going to get my money back? There are a number of errors here. Firstly, it's not your money. And some things we don't expect to get anything back from. It could be 20 years, 30 years. And political cycles aren't built for returns in 20 or 30 years. It's very interesting because Heckman's returns are over 20-30 years and we tend not to have that conversation, just that you're going to save." – Economist

Criticism was directed towards the emphasis on seeking "sustainable business models," at the expense of prioritizing a rights-based or ethical approach.

I think there's been a lot of wasted effort on childcare, trying to find sustainable business models. And there really aren't any anywhere. There's no such thing as 'sustainable.' It's like saying, 'We want to make a sustainable business model for schools, for the poor'. It doesn't exist." – Economist

One respondent believed that the reason for low global finance commitments for ECD is the failure of advocacy for a robust global finance mechanism such as the Global Alliance for Vaccines and Immunisation (GAVI) or the Global Fund to Fight AIDS, Tuberculosis and Malaria – both of which resulted in a successful reduction in rates of these diseases.

Backloaded funding in LMICs

Respondents reported that in LMICs, ECD usually has a low policy emphasis - 'something that the foreign assistance folks manage.' While highincome countries are making the shift from more backloaded funding profiles to balanced ones, in LMICs the emphasis is on secondary school and higher education, with children receiving few services unless they go to school – 90% of domestic finance for education goes to compulsory school while only 6% is invested in preschool. A number of respondents argued that there was an urgency to advocate for funding to strengthen the home environment, by providing social protection such as universal child benefits and maternity leave and pay so that ECD interventions can take place as early as possible. According to one respondent:

Foreign assistance needs to catalyze domestic financing and really start to shift some of that money away from higher education – not necessarily compulsory secondary school, but higher education – to bring it forward and make the case that reorganizing domestic finance is an optimal way for child development overall. You will get more out of the dollars you put in to the education system." – Policy expert

Financing for systems transformation

As national budgets do not typically have improvements built into them, respondents produced several recommendations for the strategic allocation of resources for 'systems transformation.' Financiers should:

1. Build strategic continuity by identifying innovative financing mechanisms to enable longer-term funding (10 – 20 years). The average three-year funding cycle was criticized repeatedly as 'short-termism,' with one respondent stating that it was unrealistic for ECD investments to mature in a linear fashion over a three-year period. Funders should consider forming a consortium for long-

term commitment to system transformation, with innovators being ongoing learning andimprovement partners. This may involve a mix of several financing instruments, akin to private equity investments.

You don't finance a company with just one stream of capital. You put together four or five different kinds of debt, different kinds of equity – early stage, later stage, and project finance. We need to be thinking much more creatively about financing on an ongoing basis. And my core message is that as opposed to a model where funders are in and then out, they need to think of themselves much more as part of a consortium where they represent one stream or type of financing, and they need to help to create the full portfolio of financing." – System expert

- Support interventions that plan for scale from their inception. This would motivate researchers to focus on implementation rather than attempting to prove the efficacy of 'petri dish' interventions.
- 3. Focus on the integration of piloted interventions into the existing systems of countries, especially into health and education systems. In addition, there is a need to ensure that all ECD interventions themselves, such as nutrition, hygiene, and child protection, are integrated with each other.
- 4. Support cumulative learning by working with governments to ask questions about adaption and to 'tweak' aspects of interventions for particular contexts, empowering governments to drive their own systems improvement more effectively.
- 5. Focus on the amount of improvement in the lives of individuals, rather than on the number of lives touched by an intervention, which often does not correspond with a positive impact.

In summary, financing for system transformation requires a more strategic, long-term view that seeks a more effective strategic allocation of resources and cumulative learning.

Child-lens investing

A relatively new development in ECD finance is child-lens investing, which is aimed at Impact and Environmental, Social and Governance (ESG) investors. It is an approach through which private investors intentionally consider child-related factors, to advance positive child outcomes while also minimizing child harm. With its intention to overcome the siloed nature of ECD financing, child-lens investing considers the wider ecology of well-being and the universality of positive child outcomes from an investment perspective. 180 UNICEF is presently partnering with numerous stakeholders to develop a framework for child-lens investing, which was was launched at the UN General Assembly in September 2023. This will be followed by the building of an investment thesis articulating the needs, trends, opportunities, and risk mitigation for investors, taking into consideration predicted changes globally over the next decades, such as the development of artificial intelligence and climate change. Setting benchmarks for good investments will also be considered.

We're building this predictive model, and our problem is what are we solving for? To say, if you put all these investments in, this is what you get. And what is it that we're trying to move the needle on?" – Economist

Child-lens investing will also address the issue of short-termism in ECD financing, and one respondent believes that the concept of 'patient capital' will characterize this field.

So, investors would be willing to wait 10-15 years before they get the return on their investment – when it comes to children, whichever sector you're honing in on, I think there's this recognition that the return on the

investment has to be somewhere around 15 years. And there are investors, particularly within the climate or agriculture sector, who already have long-term fund investment Horizons." – Economist

One of the challenges of the field is to marry the interests of investors with the trends in ECD. Investors tend to look at market opportunities based on population growth and consumers for their products or servicess rather than adopting a holistic view of the issue that includes child development.

Some of the work that we're trying to tease out is to really lead them on a learning journey. To say, 'Listen, have you thought about what COVID opened up in terms of opportunities to rethink the education system? And what would investing in an education system that is pandemic-resilient or responsive look like?" – Economist

KEY TAKEAWAYS

- The polycrisis has redirected ECD financing to other perceived priorities
- The fragmented framing of ECD has led to donors who address areas of development discretely, rather than focusing on a lifecourse approach
- LMICs are characterized by backloaded financing, providing very little support for children aged 0-3 years
- There was criticism of the concept of seeking an 'investment return' from money invested in children
- There is a need to encourage funders to take a longer-term, multisectoral view of ECD investments
- Child-lens investing may offer a promising tool for encouraging investment in the early years

Problems with didactic approaches to parenting

One respondent noted that in the field of parenting, the focus has been on teaching parents specific skills – responsive care, for example – rather than supporting them to activate their intuitive response to their child. Financiers have had a tendency to view responsive care as a skill to be learned, with a problematic mode of delivery where parents are 'lectured to' on specific responsive care techniques. This gives the parents the performance-oriented goal of achieving certain 'tasks.' This approach is unmotivating to parents and ineffective in largescale interventions.

As a parent, I'm very responsive because I know the next thing to teach is this! Yeah, I am! And I must do it now! And I must do it quickly! And I must do it in this particular way! This is the way some funders are seeing and promoting responsive care." – Researcher

Building demand for parenting and home visiting

There is little reported demand at a community level in LMICs for parenting and home-visiting programs, as parents have little knowledge of the benefits of stimulation, play, and brain development. Respondents suggested that advocacy should be intensified to promote parenting programs. One respondent suggested that the approach to building demand should come from preschools, asparents are generally more motivated to send their children to preschool due to the view that it will prepare them for primary school.

So, I still believe that's how government should start - by promoting preschool and a good preschool. And at that point, the teachers will be saying to the parents, 'Look, your child's not even ready for preschool, so you need to attend this parenting program to start introducing

learning through play and reading books or looking at pictures with your child'. Then that would raise the demand for parenting. So, although a lot of people have thought of it in the reverse way - that you start at birth and move forward, that's just not how parents are going to buy into it." – Researcher

Other suggestions to support parenting are the education of adolescent girls and increased focus on maternal mental health, which respondents reported is low priority in LMICs.

Bilateral funders

Several respondents were concerned about the withdrawal of a number of funders from the field of ECD improvement, although they recognized that some funders were growing the funding envelop. Additionally, and perhaps more importantly, they lamented the fact that there was not a bilateral champion for ECD.

We still don't have a bilateral champion, and we have all these crises and things that make it even harder, I think, to bang the drum for young children." – Funder

The same respondent added that there was some hope, given the recent publication of the Global Child Thrive Act in the U.S. which offered some leverage for pushing the U.S. government on USAID funding.

Implementation

Although a number of successful pre-primary interventions have been developed and implemented, there has been slow growth for services addressing the 0-3 age range, including support for parenting, childcare, social protection, and disability. Despite national ECD policies in a growing number of countries, there are not many with reported success in national implementation of coordinated, high quality programs, with the appropriate resources and support, or with evidence of impact on children's development and learning. One respondent noted that a common problem with national

implementation is that bureaucracies do not typically have highly motivated people at the front line. Instead, they are mired by bureaucratic flaws, with a focus on activities rather than results. Key enablers for implementation were seen to be coordination, governance, and human resources development.

1. It is critical to coordinate implementation across health, education, nutrition, and protection.

That's a lot of inter-ministry, interagency coordination at a population level across the country – about which families need what in the prenatal period, the postnatal period, during the first thousand days, and then into the pre-primary years and the transition to primary. So, that's all quite complicated." – Researcher

- 2. Governance:Co-ordination at the national, subnational and local levels.
- 3. Support caregivers and teachers through the employment of well-recognized principles of workforce support at scale, including in adult learning, motivation, and structure.

There is a notion of supporting teachers with a combination of curricula, lesson plans, teaching and mentoring, and materials. And so, when you bring that package together – this is true in early childhood education as well as in primary education – you find evidence of pretty robust impacts on learning. There are success stories in primary education on that front, in places like Kenya or India." – Researcher

4. Employment as an ECD practitioner is often seen as a 'fallback' position in LMICs. There needs to be increased recognition of the ECD workforce, professionalization through qualification, and investment in understanding the needs of frontline staff (e.g., community health workers who deliver interventions).

Preschool

One respondent reported that several quality preschool programs have been developed and implemented in LMICs, with good methods for evaluating both quality and child outcomes. Most of these programs are showing positive outcomes, leading to many more children accessing pre-primary and primary school. There is a growing emphasis on teaching literacy and numeracy in LMICs, rather than just play.

Initially they focused on play because U.S. funders and researchers thought that was the essence of preschool. Everything was dominated by this sort of American experience, even though everybody knew that you need to bring in literacy and numeracy at that age in low- and middle-income countries. These were not middle-class kids who had exposure to literacy at home the way they do in the U.S." – Researcher

However, according to one respondent, there still needs to be more consensus on what constitutes a good preschool program.

Still too many people are saying it depends on context." – Researcher

There were several reported catalysts for the improvements in pre-primary education:

- 1. Millennium Development Goal 2 aims to achieve universal primary education.
- 2. Through the necessity to prepare children for primary school, pre-primary education became a focus.
- 3. Good measures of quality and child outcomes have been developed, including the Early Grade Mathematic Assessment Toolkit (EGMA) and the Early Grade Reading Assessment Toolkit (EGRA).
- 4. There is an increased focus on teacher training for preschool.

However, quality preschool program coverage remains limited in LMICs, with Africa facing persistent challenges in improving both accessibility and quality. Despite the growing acknowledgement of the sector's significance, there is no commensurate investment, with most preschools being privately funded. Further work is required to encourage governments to fund pre-primary education and the training of pre-primary teachers (many working in the ECD field are actually qualified as primary school teachers, and therefore do not have the requisite skills to work with preschool children).

The future of education

Some respondents believe that the simplest part of the agenda is traditional education, because it is handled by the education system which is well-developed institutionally. However, there was a concern that school systems are not future-focused and innovative enough to address the challenges of the polycrisis and the growth of artificial intelligence. Rather than building on children's natural innovative abilities, they still mould conformity.

If you go to the doctor today, and then you go back, whatever, 30 years ago, you wouldn't recognize the processes that are followed in terms of diagnostics. Things would look dramatically different. In education, things look amazingly similar, not just to 30 years ago, but to 100. It's the same technology that we're using. It's a super conservative industry...And it is really worrisome." – Advocacy and education expert

One respondent compared COVID-19 to a mega experiment where teachers and parents were required to innovate to enable learning for children. The response to this challenge was suboptimal, evidenced by the backsliding of educational indicators in the post-COVID period.

Now we're all very concerned that the inertia in the school system is such that we're going back to the old ways. I think

it's about the whole education system, to what extent we can recreate the sense of innovation, entrepreneurship, experimentation in a more benign form than through a deadly pandemic. I think that's really the challenge." – Economist

Early childhood care

Many of the respondents stated that the COVID-19 pandemic shone a light on the importance of early childhood care – how important it is that investment in child development also supports gender equity, and that child care also be a means by which parents could return to the workforce.

We know a lot less in global settings about the key ingredients of high-quality early childhood care and education programs, specifically for the younger age groups like zero to three." – Academic researcher

I was saying that the only national demonstration of impacts of a parenting program implemented across a country was in Peru. We just don't have enough examples of national quality implementation, with evidence of impact paired with how we implement this kind of program." – Policy researcher

Scaling up

The world will not evolve past its current state of crisis by using the same thinking that created the situation." – Albert Einstein

A common theme amongst many of the respondents was a despondency about what happens when effective interventions are taken to scale. They argued that if you are not building in scale from the beginning, you can forget about scale –pilot studies are simply never taken to scale.

The important thing around scaling is that you get these amazing pilot studies, which then transition to some kind of small scale and are really effective, and then just totally fall apart when they are tried at some higher level of scale." – Economist

One respondent even went so far as to say that the very idea of scaling an intervention was problematic – that it was an "oxymoron." Another commonly expressed view was that the scientific literature has been highly successful in making the case for the importance of the early years – for how adversities experienced early in life may have impacts across the life-course, and for how interventions conducted in highly controlled settings may have a major impact – however, we have not shown how these same interventions can be integrated into existing services, or how they can have similar impacts when implemented at scale. One respondent stated that, in the advocacy realm, the field may have oversold what impacts these programs can have.

I think this is the tension that we have faced, and I do worry a little bit about the ways that science has been used for advocacy so far. I think it's done a great job of saying, these are the challenges that kids are facing. We need to be investing more. I do worry we've oversold a little bit what some of these programs can do at scale." – Academic researcher

Another concern that was expressed was what happened when promising approaches were taken on by governments with the aim of scaling. For instance, one respondent stated that there are principles around how to support the workforce involve adult learning, motivation, coaching, and mentoring, but that these are rarely invested in when governments take programs to scale.

Some respondents thought that the concept of scaling by creating multiple intervention sites in LMICs should be reconsidered, as it is too onerous on many countries, especially those that do not budget for ECD. Rather than judging success by the number

of intervention sites, small gains – such as increased fiscal commitment – should be commended and encouraged.

When people say, 'We've scaled and we're collaborating with a particular government,' we know that's not true, having worked with governments in Africa. They are not taking up these things. They are not committing money from fiscus. It is happening very slowly." – Researcher

In most cases, effect sizes are smaller for scaled interventions. A suggested reason was that the bulk of finance focuses on initiating the intervention or transitioning to scale, rather than on building system improvements such as technology, processes and protocols, infrastructure, and training. Interventions lose energy, becoming activity-driven and bureaucratic. Therefore, financiers should consider redistributing funding across the implementation phase of the intervention. There was also a suggestion that, for better outcomes, scaling should take place horizontally, rather than vertically. Scaling of parenting programs such as Crianza Feliz in Brazil were criticized as being 'top- town.' involving lots of mass media and advocacy which ultimately proved ineffective

A number of respondents also spoke about how the very concept of scaling appears to be misunderstood. One respondent stated that while she was supportive of a number of international funding efforts and that their aspirations were good, in fact they misunderstood how scaling takes place.

The second thing is this major misunderstanding of scaling. It makes my brain boil when I mean, there's just recently been this seminar on scaling and we're talking about moving to five sites or scaling up to 200 – or this is not scale. You've got to have a perspective of a low- and middle-income country to actually talk about scale. Scale means that you'll fundamentally change the population curve rather than do the scaling thing." – Researcher

Another respondent, echoing the idea that scaling is misunderstood, argued that the number of steps taken to scale is often not fully comprehended.

I think scaling is often misunderstood. It's as if you move a pilot study to the entire country, when in fact there's about 500 steps in between." – Funder

Learning from the health sector

One respondent recommended taking lessons on systems improvement from the health sector, which has emphasised impacts on basic health outcomes at a national scale – for instance, the way that CHWs in South Africa were leveraged in task-shifting to achieve national impact on HIV/AIDS. The mainstreaming of the kangaroo model of care for preterm infants, which was achieved over a long period of small steps through the commitment of a large number of stakeholders, ¹⁸¹ also serves as an exemplar for systems transformation, according to one respondent.

Measurement

Respondents viewed investment in appropriate indicators and standardized measurements for both implementation and outcomes as a necessary component of national systems integration and transformation. There was consensus regarding the progress in the development of measuring tools in recent years.

Ten years ago, there were no measurement tools that were validated for global settings to measure early child development. Now we have a lot more. We've had a lot more people, for example, using the Multiple Indicator Cluster surveys to generate global data on ECD... I think they've really exploded and that has generated a lot more large-scale databases to do research and analysis." – Researcher

Some respondents believed that the development of the Global Scales for Early Development (GSED) was a significant advance in providing a standardized method for measuring the development of children at the population and programmatic levels. Although it is only validated in a few countries, there is a view that its wider validation would enable the development of norms necessary for developmental assessment globally. However, there is a caution that the international adoption of the GSED is likely to take time, as will its use to generate data to improve services and support for children globally. An interesting observation from one respondent was that most current measures (including GSED) are based on 'old science' - such as the 1932 Gesell Developmental Schedules – and have not incorporated recent work and thinking.

I know children who can stack three blocks. Well, what does that mean? It doesn't mean anything at all except that it has some relationship with age. It doesn't mean anything at all except that you can do three after you can do two, so you have a progression. That doesn't speak to development." – Researcher

There was also concern that many measurement tools are not culturally responsive, most having been borrowed and adapted from the Western context.

We need tools that are contextualized and meaningful for our (African) context. So that what we are measuring is actually a reflection of children's abilities or children's performance. I think the process of modifying tools is a bit problematic because you find people taking a tool from the West and changing one or two terms and saying, 'I've adapted this for our context,' but I think that is not the right way to go about it. There should be full-scale development of tools that would be meaningful for this context." – Researcher

Research

There was wide agreement that there has been significant growth in ECD research in recent years, including in LMICs, that has provided a consistent body of evidence of what can be done to support children's development in the early years, and for making an investment case for ECD. This research has demonstrated that it is not only important to focus on children's physical health and nutrition, but to provide support for them cognitively, socially, and emotionally. The Lancet series on early child development (2016) was noted as being particularly impactful in raising global awareness about the critical role of early childhood development in shaping future outcomes and the importance of investment in ECD programs and policies.

There was increasing recognition of the importance of data to help policymakers make decisions about interventions. It was noted that there has been an increased focus on translational science – presenting evidence in distilled ways that can facilitate changes in policy and practice.

I've been particularly impressed by the advocacy of the global ECD community as well as the focus on translational science. Again, ECDAN and Nurturing Care framework are the kinds of initiatives that I would say have been really central in doing that." – Key informant

Optimisation of finance for research

There were concerns among respondents about the inadequate optimization of research funding. Some believed that there is a need to improve the distribution of research findings, particularly of implementation science for the cumulative learning of the ECD community. One respondent pointed to the importance of publishing implementation findings, even when interventions have not been successful.

There needs to be an avenue to publish this type of data. Still, there are too few outlets for disseminating implementation research. There's a lot of it going on, but we don't hear about it." – Researcher

One respondent argued that there is widescale waste of research funds in the academic community and international organizations, who do the same things over and over again. They argued that funds should instead be allocated to benefit children more directly.

There's an awful lot of it. A lot of academia is running over things again and again, and a lot of the international organizations are producing models and processes which fundamentally keep them in a job." – Economist

Geographic representation

One respondent pointed to an imbalance in the global leadership of ECD research, noting the difficulty for researchers in LMICs to access finance. Several respondents said that they would like to see more geographic representation in research within countries and across continents.

I was feeling that there was too much dominance by the American experience. I still feel that way about preschool research - that citations in papers are dominated by the U.S. In fact, if you don't have enough U.S. papers in there, they tell you that you have to cite them. And the quality measures are coming from the U.S. They totally ignored British measures, the ECRSE extension, which actually has some assessment of literacy and numeracy and correlated better with child outcomes compared to the American quality measures. But you still don't find American researchers of preschool citing any of the British or anybody from Kenya who used the British measure." -Researcher

A few researchers were heartened that there is now a growing contribution of local researchers based in LMICs, and a lot more global research published in journals.

The petri dish of randomized control trials

A number of respondents acknowledged the importance of RCTs in providing evidence and establishing causality, but they noted the problem of assuming that evidence from these 'petri dishes' was credible or always generalizable. They were worried that these may present false promises to an organization funding ECD programs.

....a silver bullet of an intervention that's going to improve things and the assumption is that the intervention can be specified and isolated from the delivery system that's actually carrying it...It is a form of short-termism. The expectations are unrealistic...And funders are always very keen that you go to the worst places in the world to try and make this work so that you can really show that this is a robust intervention. There is a risk that when you target these bullet-like interventions and just evaluate the outcome it might be negative. You have the science which knows what works but the study says 'no' so funders may move on. The types of efficacy studies of the silver bullet are too simplistic." -Systems expert

It was noted that many of the studies that have been used to demonstrate the benefits of early learning interventions had small sample sizes – including the Jamaican study by Sally Grantham McGregor, and the Perry Preschool Program. The promotion of this evidence has not adequately taken context into account – the context of implementation and the variability in children's environments, particularly in LMICs. For example, the evidence for home-visiting programs was described as 'overstated' on the basis of a few small trials, but this is not valid for situations where both parents work and environments in LMICs such as dynamic slums. There was a view that some

funders tend to finance pilots in favour of strong programs and robust measures

for the sake of 'innovation.' As interventions lack credibility, this research does not get published and does not enter the critical space where cumulative learning can take place.

They're weak programs and they didn't have any interesting results... So long as it looked like an innovative delivery system, they said 'Great!' and then, of course, it would fall apart" – Researcher

KEY TAKEAWAYS

- There has been significant growth in ECD research in recent decades
- The polycrisis has redirected ECD financing to other priorities
- Although more is being published by local researchers in LMICs, research continues to be dominated by HIC research
- There was criticism of adopting randomized control trials and pilot studies for the purpose of scaling
- Respondents reported an urgent need for system transformation using implementation science –trying to understand the core ingredients of an intervention and how it can be adapted and integrated to a local system

From system adoption to system transformation: A case for implementation science

Numerous respondents noted the importance of reaching more children. However, the current approach of scaling by growing the number of intervention sites implementing the RCT or pilot model was roundly criticized. There is also a perceived fragmentation of ECD interventions, with

many being trialled over short periods, creating a barrier to the cumulative learning necessary to improve outcomes. Most believed that the quest for 'innovation' associated with RCTs and pilot studies should be replaced by the contextual adaption that characterizes 'systems transformation' – involving continuous learning in the field, rapid cycle research, and a focus on understanding the heterogeneity of empirically-established interventions so that core ingredients can be better understood for adaptation to real-world, diverse contexts.

Who is benefitting more and who is benefitting less from interventions? Can we strengthen the intervention to support those who are not benefitting – for example, the most disadvantaged? What is the mechanism by which the intervention works?" – Researcher

According to one respondent, systems transformation involves a crucial capacity-building layer between piloting and repeating the pilot at a larger scale.

It's not a straight path from fragmentation to scale. You actually need to have a strategic layer about what things should scale, where they should they scale, and in what contexts. And how do we partner with the systems that are trying to do things at scale and looking for the things that could help them better. It's a supply and demand issue, as opposed to just pushing scaling from the supply side. We've got something that works, so how do I make it scale? We're trying to work the integrated context." – Systems expert

According to respondents, system adoption assumes that philanthropists are "temporary midwives to good ideas that will be picked up by systems" while systems

transformation rethinks the role of philanthropy and large international institutions. It involves longterm 'learning partnership' collaborations between scientists, financiers, and large system experts from outside of the ECD field to interrogate and work with local variables including elements of the system necessary for success (e.g., training and supervision). It also involves a quest for constant improvement by working with systems' internal improvement capacity.

For systems transformation, it is necessary for data to be owned by governments and for technical support to integrate data into existing national surveys and systems for health, education, and social protection. Not only quantitative but qualitative data is needed to understand how variables in systems such as health and education work to support or impede interventions that are being introduced to promote children's development.

It's a flippant mindset to say that variability is your friend. You want to learn from variation because it's telling you something about the system. And then how do you use variation to stimulate learning? The importance of variability occurs in who the frontline worker that happened to have the interaction with, the nature of their relationship to the parent, their level of motivation, and what their supervisor was doing." – Systems expert

System transformation uses data to track outcomes as a guide to making progressive improvements, rather than to predict what progressive improvements need to be made.

Basically, what you do is track outcomes. You say 'Where am I getting better outcomes and where am I getting worse ones?' And so, it's all about the distribution and you keep looking, 'Well, what's different about the places where I'm getting better outcomes from the places where I'm getting worse ones? It's the weekend shift when we get worse outcomes. Well, what's different about the weekend shift? And then you discover, well, it's not about the people, but it turns out we turn off this other system.' But because you're dealing with a complex

system, you don't know in advance what to look at. It's a process of enquiry as to where things are better versus where they are worse. It's a problem-solving process to keep asking Why? Why?" – Systems expert

Quality

A common theme across many respondents was the issue of quality – quality of programming, quality of evidence, and the use of quality indicators.

Another obstacle is that poor countries are trying to use volunteer workforces, which yeah, like in Africa, they have community health workers who are part of the system, but they're so busy with other stuff that they hand over the parenting to these community-based volunteers. And they are as unfamiliar and as naive as parents are. It takes a lot of training to get them up to speed and to get them to deliver a quality program. Financing and training, a proper workforce, I mean, at some point they're going to have to pay these people a stipend because they're just losing them at a very quick rate." – NGO

I think also that measurement would be not just measuring development outcomes in terms of interventions and policies, but also being able to measure the implementation processes and characteristics. What do we mean when we say 'high quality parenting program'? No matter what the variation of these parenting programs, what are the features that we want to say are essential to high quality? I think there are areas where we don't have standardized measurements that we need to be investing in." – Researcher

Digital futures

In the context of the exponential growth of technology, including artificial intelligence, a number of respondents stated that leveraging technology to improve research and practice is essential.

Technology could be used to track the child in its environment holistically to understand how various interventions impact on development.

For example, technology is underused in assessing child and parent interactions and capabilities in a more granular way (See Figure 19 for a short description of an ongoing project to develop machine learning approaches to assessing parent-child interaction).

Well, that's building up a database questions like – how are these kids progressing, which ones are progressing, which families are not progressing? What other things are going on that aren't just about the protocols? There's a lot of other stuff about whether the family is able to execute the protocols. Like what if the household income has plummeted because they can't work, because they have to spend time at home with the child?" – Researcher

On the other hand, there was concern about the danger of technology being increasingly used to pacify children. A respondent recommended that a regulatory framework for technology use, particularly for young children, should be developed by the United Nations.

I think that's only going in one direction unless there's very deliberate efforts to change it." – Researcher

Responding to the polycrisis

All respondents stated that the polycrisis will continue to present grave risks for children globally. Climate change, threats to democracy, rapid unplanned urbanization, and humanitarian crises related to conflict are expected to drive up malnutrition and forced migration. There is significant concern that growing is inequality affecting the most vulnerable children, including those with disabilities and those that are difficult to reach(for example, in pastoral communities and informal settlements).

There is a concern that we fail children because we may be only thinking about the short-term things that we need for young children. Immediate survival things, but not what they need to be able to thrive – their rights to citizenship, their rights to access education, their rights to access health, their rights to access protection and all those things that we need to ensure children's rights." – Researcher

One notable challenge is the step back to the goal of child 'survival' from that of 'thriving', which has more long term, less measurable objectives. There is a need to intensify efforts to advocate for child thriving among policymakers who are managing many pressures.

We haven't framed it at the moment in a way that tugs the heart, the way that the idea of a little child getting sick and dying does. And for a policymaker, it's very ethical for them to take the view that, yeah, we want our country to be better off or our world to be better off 20 years from now. But they've got other pressures on them." – Researcher

Going forward, a key risk lies in ineffective resource allocation without system improvement or integration across various stages of child development. According to one participant, the solution to tackling these pressures involves implementing interventions that combine both poverty reduction and social protection. These interventions should adopt a multigenerational approach while also aiding adults in achieving economic productivity, not solely in their role as parents.

In conclusion, one respondent summarized a number of key issues emerging from the interviews.

How do we maximize implementation quality? How do we address financing needs? How do we ensure multisectoral approaches that are sustainable, that are scalable? How do we celebrate cultural values while also not being paralyzed by this idea of having each culture define its own outcomes and targets? So I think there's a lot of really open questions about how we leverage the advocacy momentum that we've made over the past ten years to actually bring this into practice and to understand those more nuanced questions that help the field to move forward."

— Researcher





Conclusions and recommendations

Historically, pandemics have forced humans to break with the past and imagine their world anew. This one is no different. It is a portal, a gateway between one world and the next. We can choose to walk through it, dragging the carcasses of our prejudice and hatred, our avarice, our data banks and dead ideas, our dead rivers and smoky skies behind us. Or we can walk through lightly, with little luggage, ready to imagine another world. And ready to fight for it." *Arundhati Roy, 2020*¹⁸²

In the first year of the pandemic, Arundhati Roy posed this challenge to us.

However, far from a portal into imagining the world anew, the pandemic has been little more than a regressive bridge, obliterating so many of the gains of the last two decades. Children today are living in a world of considerable risk, whether navigating jungles in the Darien gap; living in the refugee camps of Syria, Turkey, and Kenya; or falling ill on the floating disease-ridden barges of an intolerant U.K. government. Climate breakdown, the aftermath of the COVID-19 pandemic, political fracturing, and widespread conflict and migration are all co-occurring and being exacerbated by growing economic risks.

And the political response? In a rather harsh reading, the September 2023 High-Level Meetings at the UN General Assembly in New York were recently described as "saying nothing new. They offer no fresh commitments. They recycle ancient promises. Even worse, they are riven with clichés and lies". 183 This is an aspect of the reality that forms the backdrop to this report.

Top 5 priorities

Perhaps the main high-level takeaway of this report is the extent to which the most marginalized and vulnerable children (those with a disability, migrants, children being trafficked, and those in need of child protection services) continue to be 'invisible.'

Climate breakdown is the singular threat to the future of vulnerable children. In Response, however, there is the strong likelihood that a 'climate breakdown donor industry' will emerge —an industry focusing ever more narrowly on particular shocks and consequences as each donor fights for their space. Virtually all the sequalae of climate breakdown are the very consequences of our current reality — displacement, floods, food insecurity, violence and conflict. A child suffering from stunting is suffering from the same stunting whether caused by a drought or by war. Children need to be at the centre — not climate.

Another shortcoming has been that simply imagining that success in advocating for children will translate into financing has been a mistake. One of the outcomes of the 'survive agenda' has been the increase in numbers of children with a disability. The most marginalized and vulnerable children continue to be invisible, and this needs to be addressed. Linked to this is the issue of the child protection sector, which is woefully inadequate.

- Climate breakdown is a major risk to children in the next decade, and with this there will undoubtedly be a massive uptick in humanitarian emergencies and increasing numbers of migrant children
- Children with disabilities are a particularly vulnerable group and have been largely ignored
- Child protection is massively neglected, with ever-increasing numbers of vulnerable children becoming 'invisible' within already vulnerable populations
- A system transformation is urgently needed for sustainable change
- We recommend learning partnerships
- Our current financing models are inadequate, and funding has not followed from advocacy success
- Long-term funding across the life-course is essential to better understand the mechanisms of child development

Other priorities

Another high-level takeaway is that something radically new is needed in how we conceptualize and frame ECD and the role of young children in policy formation spaces. Children – particularly young children – do not have a voice, and nowhere was this as apparent as during the pandemic.

Addressing the issue of childcare is a synergistic satisfier, ¹⁸⁴ where satisfying one need (responsive caregiving for young children) contributes to the simultaneous satisfaction of another need (maternal employment and income-generation). This report has also shown that the hope that evidence generated in tightly controlled RCTs will naturally translate into scaled-up system change to affect population health is not plausible. Linked to this is the ongoing focus on producing new 'branded' interventions to show that early intervention is important. The case has been made, and what is needed now are large scale implementation studies targeting system transformation.

What is needed are common-element approaches that target proven mechanisms of change.

The current funding model of many donors, philanthropies, and research funding agencies focuses on short term rapid impact. However, child development is progressive and unfolds across the life-course. As a result, there is a mismatch between the short-termism of funding and the long-termism of child development. Long term, life-course funding must be unlocked to truly understand the shaping role of early experience and intervention on later development. Finally, despite the key role that the early years (first 1000 days) and the pre-school period has been shown to play in all facets of development, governments continue to prioritize educational spending from the start of formal schooling onwards. The result is countless children who are unlikely to meet their developmental potential.



- The framing of early child development and the routine exclusion of children from policy formation spaces requires urgent attention
- Addressing the issue of childcare is crucial
- 'Scaling interventions' has not proven a success and a different approach to scaling is required
- New 'branded interventions' are not required, but rather large-scale implementation science within health systems is needed
- Too often lip-service is paid to the brain development of infants but then interventions and financing are targeted at pre-school age children. Early means early

One of the issues in the field, often linked to scaling, is that of program quality. It is an all-too frequent occurrence that, when interventions are scaled or adopted changes are made to training, supervision, and even dosage. In addition, a focus on outcome has replaced careful attention to quality and implementation – powerful proxies of effectiveness. Linked to the issue of framing, it is vital that we focus on the 'whole child' in context and within an enabling environment. Linked climate breakdown is the issue of massive increases in urbanization, and all the risks that come with it. This will be particularly true for Africa and Asia. Finally, technology and Al are going to shape much of our future but are currently underutilized.

- Quality of implementation is a crucial area that has received little attention
- We are moving into a period of heightened risk for children globally that will manifest in extremely high levels of urbanization – particularly in Africa and Asia
- There is no accountability for the 'whole' child – the system remains focused on the 'part child'
- New technologies are currently underused

Conclusion

Our current approaches remain disease -focused and vertical, with children compartmentalized into the neonate, the toddler, the 'middle child,' and the adolescent. We urgently require a holistic focus on the whole child as they navigate the life-course, and an approach to policymaking, funding, and humanitarian response that puts children firmly at the centre. What is required is a move away from what John Gray, the liberal philosopher, describes as 'technocratic pragmatism' - using conventional thinking to deal with carefully defined problems. In these cases, group think, and 'the usual' answers predominate. What is needed is 'out of the box' thinking – systems transformation and a revolution in our thinking about how to ensure children emerge from the current polycrisis.

The children are always ours, every single one of them, all over the globe; and I am beginning to suspect that whoever is incapable of recognizing this may be incapable of morality." – James Baldwin

Appendix 1: All countries, all papers 2020-2023

| Review | Reference | Key takeaways |
|---|--|--|
| Agrawal et al., 2022 ¹⁸⁵ | Agrawal, P., Nair, D., Salam, S. S., Islam, M. I., Hamadani, J. D., & Alonge, O. (2022). Does Long-Term Enrollment in Day-Care Maintain or Increase Early Developmental Gains-Findings from an Intervention Study in Rural Bangladesh. Children (Basel), 9(7). doi:10.3390/children9070929 | The cognitive and psychosocial improvements seen with short-term exposure to structured ECD programs (day-care) were observed to be sustained over time with continued exposure. Home stimulation and parental involvement add to the long-term benefits of ECD. |
| Andrew et al., 2020 ¹⁸⁶ | Andrew, A., Attanasio, O., Augsburg, B., Day, M., Grantham-McGregor, S., Meghir, C., Rubio-Codina, M. (2020). Effects of a scalable home-visiting intervention on child development in slums of urban India: evidence from a randomised controlled trial. J Child Psychol Psychiatry, 61(6), 644-652. doi:10.1111/jcpp.13171 | Potentially scalable home-visiting intervention is effective in poor urban areas. |
| Arabin et al., 2021 ¹⁸⁷ | Arabin, B., Hellmeyer, L., Maul, J., & Metz, G. A. S. (2021). Awareness of maternal stress, consequences for the offspring and the need for early interventions to increase stress resilience. J Perinat Med, 49(8), 979-989. doi:10.1515/jpm-2021-0323 | Discusses how maternal stress influences cognitive development and resilience, but also designs possibilities of non- invasive interventions for both mothers and children, summarized and evaluated in light of their potential to improve the health of future generations. |
| Attanasio et al., 2022 ¹⁸⁸ | Attanasio, O., Baker-Henningham, H., Bernal, R., Meghir, C., Pineda, D., & Rubio-Codina, M. (2022). Early Stimulation and Nutrition: The Impacts of a Scalable Intervention. J Eur Econ Assoc, 20(4), 1395-1432. doi:10.1093/ jeea/jvac005 | Describes and evaluates using a cluster-Randomized Controlled Trial of an intervention designed to improve the quality of child stimulation within the context of an existing parenting program in Colombia, known as FAMI. The intervention improved children's development by 0.16 of a standard deviation (SD) and children's nutritional status. |
| Attig et al., 2020 ¹⁸⁹ | Attig, M., & Weinert, S. (2020). What Impacts Early Language Skills? Effects of Social Disparities and Different Process Characteristics of the Home Learning Environment in the First 2 Years. Front Psychol, 11, 557751. doi:10.3389/fpsyg.2020.557751 | Taking into account the families' socio-economic status as well as various process characteristics of the home learning environment – such as different characteristics of maternal interaction behaviour and the frequency of joint picture book reading across the first 2 years – will help to better understand what happens in families in the first 2 years and what precisely impacts the language development of children. |
| Bliznashka et al., 2023 ¹⁹⁰ | Bliznashka, L., Jeong, J., & Jaacks, L. M. (2023). Maternal and paternal employment in agriculture and early childhood development: A cross- sectional analysis of Demographic and Health Survey data. PLOS Glob Public Health, 3(1), e0001116. doi:10.1371/ journal.pgph.0001116 | Parental agricultural employment may be an important risk factor for early childhood development. More research using more comprehensive exposure and outcome measures is needed to unpack these complex relationships and to inform interventions and policies to support working parents in the agricultural sector with young children. |

| Review | Reference | Key takeaways |
|---|---|--|
| Bliznashka et al., 2022 ¹⁹¹ | Bliznashka, L., McCoy, D. C., Siyal, S., Sudfeld, C. R., Fawzi, W. W., & Yousafzai, A. K. (2022). Child diet and mother-child interactions mediate intervention effects on child growth and development. Matern Child Nutr, 18(2), e13308. doi:10.1111/mcn.13308 | Two mechanisms were mutually reinforcing, and interventions leveraging both mechanisms are likely to be more effective at improving child outcomes than interventions leveraging only one of these mechanisms. |
| Bliznashka et al., 2021 ¹⁹² | Bliznashka, L., Udo, I. E., Sudfeld, C. R., Fawzi, W. W., & Yousafzai, A. K. (2021). Associations between women's empowerment and child development, growth, and nurturing care practices in sub-Saharan Africa: A crosssectional analysis of demographic and health survey data. PLoS Med, 18(9), e1003781. doi:10.1371/journal.pmed.1003781 | Women's empowerment was positively associated with early child cognitive development, child growth, early learning, and nutrition outcomes in SSA. Efforts to improve child development and growth should consider women's empowerment as a potential strategy. |
| Blume et al., 2022 ¹⁹³ | Blume, J., Park, S., Cox, M., & Mastergeorge, A. M. (2022). Explicating Child- Driven Patterns of Parent- Child Responsivity in Fragile Families: A Longitudinal Approach. Front Pediatr, 10, 813486. doi:10.3389/ fped.2022.813486 | Findings indicate significant, positive associations over time between child pro-social behaviour and receptive vocabulary and parenting quality across all three stages of early child development. The steady decline in magnitude of these associations over time highlights the importance of synergistic parent-child interactions in toddlerhood as an early opportunity to propel these developmental outcomes and supportive parenting behaviours. |
| Boivin et al., 2020 ¹⁹⁴ | Boivin, M. J., Augustinavicius, J. L., Familiar-Lopez, I., Murray, S. M., Sikorskii, A., Awadu, J., Bass, J. K. (2020). Early Childhood Development Caregiver Training and Neurocognition of HIV-Exposed Ugandan Siblings. J Dev Behav Pediatr, 41(3), 221-229. doi:10.1097/DBP.000000000000000753 | Mediational Intervention for Sensitizing Caregivers training resulted in some short- term neurocognitive benefits for school-aged siblings, but these differences were not sustained at 1-year follow-up. Exploring potential impacts of parenting programs on other children in the home is an important development for the field. |
| Bonthrone et al., 2021 ¹⁹⁵ | Bonthrone, A. F., Chew, A., Kelly, C. J., Almedom, L., Simpson, J., Victor, S., Counsell, S. J. (2021). Cognitive function in toddlers with congenital heart disease: The impact of a stimulating home environment. Infancy, 26(1), 184-199. doi:10.1111/infa.12376 | Supporting parents to provide a stimulating home environment for children may pro mote cognitive development in this high-risk population. |
| Brentani et al., 2021 ¹⁹⁶ | Brentani, A., Walker, S., Chang- Lopez, S., Grisi, S., Powell, C., & Fink, G. (2021). A home visit-based early childhood stimulation programme in Brazil-a randomized controlled trial. Health Policy Plan, 36(3), 288-297. doi:10.1093/heapol/czaa195 | Home visiting programs have the potential to improve child development among poor urban families in Brazil. However, delivering home visiting interventions through already active CHWs may not be feasible in the Brazilian context and coordination across sectors is essential to effective ECD policies. |

| Review | Reference | Key takeaways |
|--|--|---|
| Broadbent et al., 2022 ¹⁹⁷ | Broadbent, E., McConkie, M., Aleson, E., Kim, L., Stewart, R., Mulokozi, G., West, J. H. (2022). Promoting Caregiver Early Childhood Development Behaviors through Social and Behavioral Change Communication Program in Tanzania. Int J Environ Res Public Health, 19(9). doi:10.3390/ijerph19095149 | The results presented here provide evidence for successful mass media and IPC efforts to improve parents' ECD behaviours. |
| Canfield et al., 2022 ¹⁹⁸ | Canfield, C. F., O'Connell, L., Sadler, R. C., Gutierrez, J., Williams, S., & Mendelsohn, A. L. (2022). Not built for families: Associations between neighborhood disinvestment and reduced parental cognitive stimulation. Front Psychol, 13, 933245. doi:10.3389/fpsyg.2022.933245 | Indicates that the neighbourhood-built environment is associated with parenting behaviours that have important impacts on infants' learning and development. |
| Cuartas et al., 2022 ¹⁹⁹ | Cuartas, J. (2022). The effect of maternal education on parenting and early childhood development: An instrumental variables approach. J Fam Psychol, 36(2), 280-290. doi:10.1037/ fam0000886 | Increases in maternal stimulation and children's attendance to early childhood education programs and reductions in harsh corporal punishment partially explain the effects of maternal education on children's development. The positive impacts of education on parenting and child development indicate the need for more efforts to expand access to education in Uganda and other low- and- middle-income countries, including the abolishment of school fees for primary education. |
| Cuartas et al., 2020 ²⁰⁰ | Cuartas, J., Rey-Guerra, C., McCoy, D. C., & Hanno, E. (2020). Maternal knowledge, stimulation, and early childhood development in low-income families in Colombia. Infancy, 25(5), 526-534. doi:10.1111/infa.12335 | Maternal knowledge when children were 9–26 months old indirectly predicted growth in children's cognitive receptive language, and gross motor skills at ages 27–46 months, partially through maternal en gagement in stimulating activities with the child. |
| Domek et al., 2023 ²⁰¹ | Domek, G. J., Szafran, L. H., Allison, M., Kempe, A., Jimenez-Zambrano, A., Silveira, L., & Camp, B. (2023). Finger Puppets to Support Early Language Development: Effects of a Primary Care-Based Intervention in Infancy. Clinical Pediatrics. | Finger puppets may provide a low-cost and scalable way to support early language and child development. |
| Drago et al., 2020 ²⁰² | Drago, F., Scharf, R. J., Maphula, A., Nyathi, E., Mahopo, T. C., Svensen, E., Rogawski McQuade, E. T. (2020). Psychosocial and environmental determinants of child cognitive development in rural south africa and tanzania: findings from the mal-ed cohort. BMC Public Health, 20(1), 505. doi:10.1186/s12889-020-08598-5 | Stronger association with child cognitive development at 5 years of age for socio-economic status compared to more proximal measures of psychosocial and environmental determinants. A better understanding of the role of these factors is needed to inform interventions aiming to alleviate the burden of compromised cognitive development for children in LMICs. |

| Review | Reference | Key takeaways |
|--|--|---|
| Dulal et al., 2022 ²⁰³ | Dulal, S., Prost, A., Karki, S., Merom, D., Shrestha, B. P., Bhandari, B., Saville, N. M. (2022). Feeding, caregiving practices, and developmental delay among children under five in lowland Nepal: a community-based cross-sectional survey. BMC Public Health, 22(1), 1721. doi:10.1186/s12889-022-13776-8 | Suboptimal caregiving practices, inappropriate early breastfeeding practices, delayed introduction of complementary foods, inadequate dietary diversity and low animal-source food consumption are challenges in low- land Nepal. We call for urgent integrated nutrition and caregiving interventions, especially as interventions for child development are lacking in Nepal. |
| Ebert et al., 2020 ²⁰⁴ | Ebert, S., Lehrl, S., & Weinert, S. (2020). Differential Effects of the Home Language and Literacy Environment on Child Language and Theory of Mind and Their Relation to Socioeconomic Background. Front Psychol, 11, 555654. doi:10.3389/fpsyg.2020.555654 | Findings provide new evidence on how different facets of the home language and literacy environment are related to ToM and language development and their interrelation as well as their SES-related disparities. |
| Falk et al., 2021 ²⁰⁵ | Falk, S., & Audibert, N. (2021). Acoustic signatures of communicative dimensions in codified mother-infant interactions. J Acoust Soc Am, 150(6), 4429. doi:10.1121/10.0008977 | Provides insights into the functions of acoustic variation of ID communication and into the potential role of codified interactions for infants' learning about communicative intent and expressive forms typical of language and music. |
| Fatori et al., 2021 ²⁰⁶ | Fatori, D., Fonseca Zuccolo, P., Shephard, E., Brentani, H., Matijasevich, A., Archanjo Ferraro, A., G, V. P. (2021). A randomized controlled trial testing the efficacy of a Nurse Home Visiting Program for Pregnant Adolescents. Sci Rep, 11(1), 14432. doi:10.1038/s41598-021-93938-7 | Primeiros Laços is a promising intervention to promote child development and to improve the home environment of low-income adolescent mothers. However, considering the limitations of the study, future studies should be conducted to assess Primeiros Laços potential to benefit this population. |
| Gaidhane et al., 2022 ²⁰⁷ | Gaidhane, A., Telrandhe, S., Holding, P., Patil, M., Kogade, P., Jadhav, N., Zahiruddin, Q. S. (2022). Effectiveness of family-centered program for enhancing competencies of responsive parenting among caregivers for early childhood development in rural India. Acta Psychol (Amst), 229, 103669. doi:10.1016/j.actpsy.2022.103669 | A locally adapted, family parenting curriculum was a practical approach for enhancing parents' competencies and confidence to promote early child development. |
| Garach- Gómeza et al., 2021 ²⁰⁸ | Garach-Gómeza, A., Ruiz-Hernándeza, A., María García-Laraa, G. M., Jiménez- Castillob, I., Ibáñ ez-Godoyb, I., & Expósito-Ruizc, M. (2021). Promoting early reading in a social exclusion district in primary care. An Pediatr (Barc), 94. | Results reveal a slight improvement in the preference for reading as an activity in the children that took part in the literacy program. |

| Review | Reference | Key takeaways | | |
|--|--|--|--|--|
| Garcia et al., 2022 ²⁰⁹ | Garcia, I. L., Fernald, L. C. H., Aboud, F. E., Otieno, R., Alu, E., & Luoto, J. E. (2022). Father involvement and early child development in a low-resource setting. Soc Sci Med, 302, 114933. doi:10.1016/j.socscimed.2022.114933 | Results show the potential promises and challenges of involving fathers in a parenting intervention in a rural low-resource setting. The findings do highlight the importance of considering intra-household pathways of influence in the design of parenting interventions involving fathers. | | |
| Hammersley et al., 2021 ²¹⁰ | Hammersley, M. L., Jones, R. A., & Okely, A. D. (2021). Relationships Between the Home Learning Environment, Weight Status, and Dietary Intake: Results From a Cross-Sectional Study of Preschool-Aged Children in New South Wales, Australia. J Prim Prev, 42(3), 239-256. doi:10.1007/s10935-021-00628-1 | While reading was significant across all income levels, teaching the alphabet was only significant in children from higher-income families. We also found significant inverse relationships between discretionary food intake and: visiting a library, teaching numbers or counting, and teaching songs, poems and nursery rhymes in lower-income families only. There was no association between the home learning environment and meeting individual dietary guidelines. This area requires further research to explore broader home environment factors that may influence these relationships. We also suggest that interventions explore the use of strategies to improve the home learning environment to determine its efficacy in improving healthy eating behaviours. | | |
| Hodsoll et al., 2022 ²¹¹ | Hodsoll, J., Pickles, A., Bozicevic, L., Supraja, T. A., Hill, J., Chandra, P. S., & Sharp, H. (2022). A Comparison of Non-verbal Maternal Care of Male and Female Infants in India and the United Kingdom: The Parent-Infant Caregiving Touch Scale in Two Cultures. Front Psychol, 13, 852618. doi:10.3389/fpsyg.2022.852618 | We conclude that PICTS items can be used reliably in both countries to conduct further research on the role of early tactile stimulation in shaping important child development outcomes. | | |
| Hutton et al., 2020 ²¹² | Hutton, J. S., Huang, G., Sahay, R. D., DeWitt, T., & Ittenbach, R. F. (2020). A novel, composite measure of screenbased media use in young children (ScreenQ) and associations with parenting practices and cognitive abilities.Pediatr Res, 87(7), 1211-1218. doi:10.1038/s41390-020-0765-1 | ScreenQ shows potential as a composite measure of screen-based media use in young children in the context of AAP recommendations. ScreenQ scores were correlated with lower executive, language and literacy skills, and less stimulating home cognitive environments. | | |
| Islam et al., 2023 ²¹³ | Islam, M. M., & Khan, M. N. (2023). Early childhood development and its association with maternal parity. Child Care Health Dev, 49(1), 80-89. doi:10.1111/cch.13011 | Early childhood development is negatively correlated with maternal parity. The literacy-numeracy domain constitutes the major developmental delay. Programs for parental awareness should be widely expanded. | | |
| Johnstone et al., 2021 ²¹⁴ | Johnstone, H., Yang, Y., Xue, H., & Rozelle, S. (2021). Infant Cognitive Development and Stimulating Parenting Practices in Rural China. Int J Environ Res Public Health, 18(10). doi:10.3390/ijerph18105277 | Caregivers with different characteristics engage in various levels of stimulating practices and have infants with different rates of delay. Specifically, infants of bettereducated mothers who have greater household assets are in families in which the caregivers provide more SPPs and have infants who score higher on the study's cognitive abilities scales. | | |

| Review | Reference | Key takeaways |
|--|---|--|
| Kelley et al., 2021 ²¹⁵ | Kelley, L. E., & McCann, J. P. (2021). Language Intervention Isn't Just Spoken: Assessment and Treatment of a Deaf Signing Child With Specific Language Impairment. Lang Speech Hear Serv Sch, 52(4), 978-992. doi:10.1044/2021_LSHSS-21-00038 | Study adds to the growing body of literature that unexplained language disorders in signed languages exist and provides preliminary evidence for positive outcomes from language intervention for a Deaf signing child. The case described can inform professionals who work with Deaf signing children (e.g., speech-language pathologists, teachers of the Deaf, and parents of Deaf children) and serve as a potential starting point in evaluation and treatment of signed language disorders. |
| Khuda et al., 2021 ²¹⁶ | Khuda, P., Fatima, R. A., Bhatnagar, A., Savaria, M., & Das, M. K. (2021). Promoting Family Integrated Early Childhood Development During the First 1000 Days in Urban Slums of Delhi: Feasibility and Early Implementation Experience. Indian Pediatrics, 58. | The integrated child development package is acceptable and feasible for implementation through community functionaries and possible integration into the existing programs at scale. |
| King et al., 2020 ²¹⁷ | King, Y. A., Duncan, R. J., Posada, G., & Purpura, D. J. (2020). Construct- Specific and Timing-Specific Aspects of the Home Environment for Children's School Readiness. Front Psychol, 11, 1959. doi:10.3389/fpsyg.2020.01959 | Provide evidence that although the overall home environment is predictive of school readiness, the stimulation construct of the home environment at 54 months has additional concurrent relations to children's school readiness. Implications for the role of the home environment and children's school readiness are discussed. |
| Larose et al., 2021 ²¹⁸ | Larose, M. P., Cote, S. M., Ouellet-Morin, I., Maughan, B., & Barker, E. D. (2021). Promoting better functioning among children exposed to high levels of family adversity: the protective role of childcare attendance. J Child Psychol Psychiatry, 62(6), 762-770. doi:10.1111/jcpp.13313 | Easily accessible community childcare may be a relatively low-cost public health strategy to prevent the emergence of externalizing behavioural problems in adolescence through its positive effects on cognitive abilities. |
| Li et al., 2022 ²¹⁹ | Li, X., Wu, X., & Liu, Q. (2022). Children with low effortful control benefit in high-quality home learning environment: Evidence from China. J Fam Psychol, 36(6), 1021-1029. doi:10.1037/fam0000999 | Providing a high-quality home learning environment may be a feasible target for interventions aimed at improving the development of children with low effortful control. |
| Linberg et al., 2020 ²²⁰ | Linberg, A., Lehrl, S., & Weinert, S. (2020). The Early Years Home Learning Environment - Associations With Parent-Child-Course Attendance and Children's Vocabulary at Age 3. Front Psychol, 11, 1425. doi:10.3389/fpsyg.2020.01425 | Highlights the need to differentiate aspects of the early HLE to disentangle which children are at risk in terms of which stimulation at home and the possibility to enrich the HLE through low threshold parent-child courses. |

| Review | Reference | Key takeaways |
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| Luoto et al., 2021 ²²¹ | Luoto, J. E., Lopez Garcia, I., Aboud, F. E., Singla, D. R., Fernald, L. C. H., Pitchik, H. O., Alu, E. (2021). Groupbased parenting interventions to promote child development in rural Kenya: a multi-arm, cluster-randomised community effectiveness trial. Lancet Glob Health, 9(3), e309-e319. doi:10.1016/S2214-109X(20)30469-1 | Parenting interventions delivered by trained community health volunteers in mother–child groups can effectively promote child development in low-resource settings and have great potential for scalability. |
| Luoto et al., 2021 ²²² | Luoto, J. E., Lopez Garcia, I., Aboud, F. E., Singla, D. R., Zhu, R., Otieno, R., & Alu, E. (2021). An Implementation Evaluation of A Group-Based Parenting Intervention to Promote Early Childhood Development in Rural Kenya. Front Public Health, 9, 653106. doi:10.3389/fpubh.2021.653106 | A group-based parenting intervention delivered by local delivery agents can improve multiple child and parent outcomes. An upfront investment in training local trainers and delivery agents, and regular supervision of delivery of a manualized program, appear key to our documented success. Our results represent a promising avenue for scaling similar interventions in low-resource rural settings to serve families in need of ECD programming. |
| Medawar et al., 2023 ²²³ | Medawar, J., Tabullo, A. J., & Gago-Galvagno, L. G. (2023). Early language outcomes in Argentinean toddlers: Associations with home literacy, screen exposure and joint media engagement. Br J Dev Psychol, 41(1), 13-30. doi:10.1111/bjdp.12429 | Passive screen exposure and inadequate content may be detrimental for toddlers' language outcomes, probably by displacement of socially-significant interactions. |
| Mehrin et al., 2020 ²²⁴ | Mehrin, S. F., Hamadani, J. D., Salveen, N. E., Hasan, M. I., Hossain, S. J., & Baker-Henningham, H. (2020). Adapting an Evidence-Based, Early Childhood Parenting Programme for Integration into Government Primary Health Care Services in Rural Bangladesh. Front Public Health, 8, 608173. doi:10.3389/fpubh.2020.608173 | The largest challenges were related to incorporating the parenting program into health staff's existing workload and promoting mothers' engagement in the program. We also simplified the content and structure of the curriculum to make it easier for health staff to deliver and to ensure mothers understood the activities introduced. |
| Mehrin et al., 2023 ²²⁵ | Mehrin, S. F., Salveen, N. E., Kawsir, M., Grantham-McGregor, S., Hamadani, J. D., & Baker-Henningham, H. (2023). Scaling-up an early childhood parenting intervention by integrating into government health care services in rural Bangladesh: A cluster-randomised controlled trial. Child Care Health Dev, 49(4), 750-759. doi:10.1111/cch.13089 | Integration into the primary health care service is a promising approach for scaling early childhood development programs in Bangladesh, although further research is required to identify feasible methods for facilitator supervision. |

| Review | Reference | Key takeaways |
|---|--|---|
| Okelo et al., 2022 ²²⁶ | Okelo, K., Onyango, S., Murdock, D., Cordingley, K., Munsongo, K., Nyamor, G., & Kitsao-Wekulo, P. (2022). Parent and implementer attitudes on gender-equal caregiving in theory and practice: perspectives on the impact of a community-led parenting empowerment program in rural Kenya and Zambia. BMC Psychol, 10(1), 162. doi:10.1186/s40359-022-00866-w | The study findings provide evidence for policy formulation and a guide for implementation of policies that can influence changes in perceived gender roles in parenting. |
| Piccolo et al., 2022 ²²⁷ | Piccolo, L., Weisleder, A., Oliveira, J. B. A., Mazzuchelli, D. S. R., Sá Lopez, A., Neto, W. D., Mendelsohn, A. L. (2022). Reading Aloud, Self-Regulation, and Early Language and Cognitive Development in Northern Brazil. Journal of Developmental and Behavioral Pediatrics, 43(2). | Self-regulation represents an important mechanism by which reading aloud interventions affect language and cognitive outcomes. Investigators should consider the role of self-regulation when refining interventions, seeking to prevent poverty-related disparities. |
| Piccolo et al., 2023 ²²⁸ | Piccolo, L. R., Oliveira, J. B. A., Hirata, G., Canfield, C. F., Roby, E., & Mendelsohn, A. L. (2023). Pre- pandemic support for shared reading buffers adverse parenting impacts: an RCT in Brazil. Pediatr Res, 94(1), 260- 267. doi:10.1038/s41390-022-02419-8 | Promotion of cognitive stimulation pre-pandemic may have reduced risk for effects of the pandemic on parenting/ parent-child reading. |
| Roby et al., 2021 ²²⁹ | Roby, E., Miller, E. B., Shaw, D. S., Morris, P., Gill, A., Bogen, D. L., Mendelsohn, A. L. (2021). Improving Parent-Child Interactions in Pediatric Health Care: A Two-Site Randomized Controlled Trial. Pediatrics, 147(3). | Findings replicate and extend previous VIP findings across samples and assessment methodologies. Examining subsequent assessments will determine impacts and feasibility of the full SB model, including potential additive impact of Family Check-Up for families at elevated risk. |
| Russel et al., 2022 ²³⁰ | Russell, A. L., Hentschel, E., Fulcher, I., Rava, M. S., Abdulkarim, G., Abdalla, O., Wilson, K. (2022). Caregiver parenting practices, dietary diversity knowledge, and association with early childhood development outcomes among children aged 18-29 months in Zanzibar, Tanzania: a cross-sectional survey. BMC Public Health, 22(1), 762. doi:10.1186/s12889-022-13009-y | Findings demonstrate a positive association between both the frequency of caregiver child interactions and knowledge of adequate dietary diversity, and ECD outcomes. This aligns with global evidence that promoting early stimulation, play and learning opportunities, and dietary diversity can improve developmental outcomes. Further study is needed to establish causal relationships and assess the impact of ECD programming in Zanzibar. |
| Sanchez Vincitore et al., 2022 ²³¹ | Sanchez-Vincitore, L. V., & Castro, A. (2022). The role of socio-demographic and psychosocial variables in early childhood development: A secondary data analysis of the 2014 and 2019 Multiple Indicator Cluster Surveys in the Dominican Republic. PLOS Glob Public Health, 2(7), e0000465. doi:10.1371/journal.pgph.0000465 | Although the results show a protective effect of psychosocial factors, sustainable and large-scale interventions should not be limited to just buffering effects, but to solving the underlying problem, which is that poverty prevents children from reaching their developmental potential and exposes them to life-long greater risk for chronic disease. Addressing delay early in life can therefore contribute to achieving health equity. |

| Review | Reference | Key takeaways |
|--|---|---|
| Schneider et al., 2021 ²³² | Schneider, A., Rodrigues, M., Falenchuk, O., Munhoz, T. N., Barros, A. J. D., Murray, J., Jenkins, J. M. (2021). Cross-Cultural Adaptation and Validation of the Brazilian Portuguese Version of an Observational Measure for Parent-Child Responsive Caregiving. Int J Environ Res Public Health, 18(3). doi:10.3390/ijerph18031246 | The Brazilian Portuguese version is a valid and reliable instrument for a brief assessment of responsive caregiving. |
| Shah et al., 2022 ²³³ | Shah, R., Herekar, V., Metgud, D., Kim, H., Atkins, M., & Dhaded, S. (2022). Implementing an early childhood development intervention with routine immunization visits in India: a feasibility trial. Eur J Pediatr, 181(7), 2799-2808. doi:10.1007/s00431-022-04485-w | Our findings suggest integrating an ECD intervention with routine healthcare visits is a feasible and promising strategy for supporting ECD in India. Further studies are needed to determine the effectiveness of SDP on children's development. |
| Sharma et al., 2023 ²³⁴ | Sharma, P., Budhathoki, C. B., Maharjan, R. K., & Singh, J. K. (2023). Nutritional status and psychosocial stimulation associated with cognitive development in preschool children: A cross-sectional study at Western Terai, Nepal. PLoS One, 18(3), e0280032. doi:10.1371/journal.pone.0280032 | Nutritional status and psychosocial stimulation appear to be major factors affecting cognitive development of pre-schoolers. Nutritional promotion strategies, as well as techniques for optimal psychosocial stimulation behaviour, may play an important role in enhancing pre-schoolers' cognitive development. |
| Suttora et al., 2021 ²³⁵ | Suttora, C., Zuccarini, M., Aceti, A., Corvaglia, L., Guarini, A., & Sansavini, A. (2021). The Effects of a Parent-Implemented Language Intervention on Late-Talkers' Expressive Skills: The Mediational Role of Parental Speech Contingency and Dialogic Reading Abilities. Front Psychol, 12, 723366. doi:10.3389/fpsyg.2021.723366 | Parent-implemented intervention was effective in supporting late-talkers' gains in language development as a cascade result of the improvements in parental contingency and dialogic reading abilities. Findings suggest to examine not only children and parental outcomes but also the intervention mechanisms promoting changes in late-talkers' language development as a clearer view on such process can inform the development of feasible, ecological and effective programs. |
| Thomas et al., 2023 ²³⁶ | Thomas, M. S. C., & Coecke, S. (2023). Associations between Socioeconomic Status, Cognition, and Brain Structure: Evaluating Potential Causal Pathways Through Mechanistic Models of Development. Cogn Sci, 47(1), e13217. doi:10.1111/cogs.13217 | Highlights the importance of implemented models to test competing accounts of environmental influences on individual differences. |
| Tofail et al., 2023 ²³⁷ | Tofail, F., Islam, M., Akter, F., Zonji, S., Roy, B., Hossain, S. J., Hamadani, J. (2023). An Integrated Mother-Child Intervention on Child Development and Maternal Mental Health. Pediatrics, 151(S2). | A comprehensive intervention, delivered through group sessions in health facilities, was effective in promoting child development and reducing maternal depressive symptoms among mothers who reported using negative or harsh discipline. |

| Review | Reference | Key takeaways |
|---|--|---|
| Upadhyay et al., 2022 ²³⁸ | Upadhyay, R. P., Taneja, S., Strand, T. A., Sommerfelt, H., Hysing, M., Mazumder, S., Bahl, R. (2022). Early child stimulation, linear growth and neurodevelopment in low birth weight infants. BMC Pediatr, 22(1), 586. doi:10.1186/s12887-022-03579-6 | Moderate to high quality stimulation may alleviate the risk of sub-optimal development in LBW infants with linear growth deficits. |
| Verguet et al., 2022 ²³⁹ | Verguet, S., Bolongaita, S., Morgan, A., Perumal, N., Sudfeld, C. R., Yousafzai, A. K., & Fink, G. (2022). Priority setting in early childhood development: an analytical framework for economic evaluation of interventions. BMJ Glob Health, 7(6). doi:10.1136/bmjgh-2022-008926 | With increasing attention and investment into ECD programs, consistent assessments of the relative cost-effectiveness of available interventions are urgently needed. This paper presents a unified analytical framework to address this need and highlights the rather remarkable range in both costs and cost-effectiveness across currently available intervention strategies. |
| Westman Andersson et al., 2021 ²⁴⁰ | Westman Andersson, G., Gillberg, N., & Miniscalco, C. (2021). Parents of Children Diagnosed with Autism Spectrum Disorder: What Do They Expect and Experience from Preschools? Neuropsychiatr Dis Treat, 17, 3025-3037. doi:10.2147/NDT. S324291 | This study shows that parents expect competence and knowledge about ASD among preschool staff, including the principal. They need continuous dialogue between parents and the preschool staff and expect individualized support for their child. Concerns about their child in preschool frequently occurred. |
| Yoon et al., 2021 ²⁴¹ | Yoon, S., Kim, M., Yang, J., Lee, J. Y., Latelle, A., Wang, J., Schoppe- Sullivan, S. (2021). Patterns of Father Involvement and Child Development among Families with Low Income. Children (Basel), 8(12). doi:10.3390/ children8121164 | Findings highlight the need for active engagement of fathers in parenting interventions to promote child development. |

Endnotes

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