

Early Childhood Matters

2019



Advances in early childhood development

Early Childhood Matters aims to elevate key issues, spread awareness of promising solutions to support holistic child development and explore the elements needed to take those solutions to scale. It is published annually by the Bernard van Leer Foundation. The views expressed in *Early Childhood Matters* are those of the authors and do not necessarily reflect those of the Bernard van Leer Foundation. Work featured is not necessarily funded by the Bernard van Leer Foundation.

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Cover: Father and child sharing a special moment together in Mumbai, India.

Photo: Dhiraj Singh/Bernard van Leer Foundation

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2019

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Photo: Cihan Özdamar/Bernard van Leer Foundation

To thrive: a goal for children everywhere

Joan Lombardi

Guest Editor

To thrive is to flourish, it is to bloom. For a child it means that they are able to meet their potential, to be happy, healthy, joyful, curious and strong. While the picture of a child thriving may be different across the world, depending on conditions and cultures, what is common in children who thrive is that overall sense of well-being which comes from good health, nutrition, safety and security, responsive caregiving and opportunities to learn. These are the elements of nurturing care.

That every child grows up thriving is the goal of early childhood development. It takes strong families, supported by strong communities and a set of policies that understand this principle. It takes an acknowledgement that the domains of development are integrated – thus health, learning and behaviour are interrelated. And it takes continuity of quality services and family supports, starting in the earliest years, which together provide the foundation for a lifetime of development.

Upon the publication of *Early Childhood Matters 2019*, and on the 30th anniversary of the Convention on the Rights of the Child (United Nations, 1989), we recommit ourselves to the goal that all children meet their developmental potential and that children everywhere grow up thriving. To celebrate this goal we present a tapestry of articles that, woven together, provide a glimpse of the advances in early childhood development taking place around the world. As in years past, we offer articles that reflect leadership, scaling and innovation, along with short reviews of some of the emerging trends and reports.

We kick off this issue with the voices of important leaders from the United Nations, a foundation and public officials from around the world. Together these articles demonstrate the growing support for early childhood and raise new themes and trends facing young children and families including, among others, the importance of clean air to children's health, the increasing focus on early nutrition, and new directions for urban planning. These authors represent the growing list of new champions who are standing up for the importance of the early years to long-term development and well-being.

'For a child, to thrive means that they are able to meet their potential, to be happy, healthy, joyful, curious and strong.'

The focus on scaling early childhood services includes both regional and country examples emerging across a number of topics. These examples provide insight into the various strategies being used to scale services or raise public awareness and influence behaviour. In addition, core elements central to scaling are highlighted, including the need for inter-sectoral collaboration, increased financing and workforce supports, new measurement tools, and the use of media.

The line between scaling and innovation is not always direct. Many innovations are emerging as they scale and many scaling efforts are innovating as they grow. This becomes evident when reading through the wide-ranging articles in the Innovation section which includes the use of technology to improve services, new strategies to reach whole communities and neighbourhoods, the integration of early childhood services in refugee communities and the potential of behavioural sciences to impact development.

Finally, anyone working in the field of early childhood knows that there are many exciting new initiatives and reports emerging almost every day. It is getting more and more difficult to just keep up. We were able to highlight only a few reports from the many that are emerging. These include topics such as income supports and parenting, inclusive education, transportation, urban design, air pollution and others.

Looking across all of these articles, one can almost feel the vitality of the early childhood development and related fields. Taken together, the topics covered form a quilt of individual and collective efforts to support families, promote health and nutrition, assure safety and security, and enhance early learning. While the quilt is presented in pieces, the various activities are being

knitted together in communities and countries around the world to provide a comprehensive set of services from the prenatal period through the early years and beyond.

We want healthy births, engaged and loving fathers as well as mothers, and opportunities for young children to become successful and to fulfil their potential regardless of where they live or the conditions they face. To achieve these goals we need public policies that recognise this continuum and a qualified workforce that is respected and supported. We call upon everyone to pull together, to promote equity and justice, to speak out for children and to move with clear direction towards the common goal of all children thriving, everywhere.

→ Find this article online at earlychildhoodmatters.online/2019-ed

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Photo: Vanessa Touzard/Bernard van Leer Foundation

Bold leadership – or as we see it, the ability to mobilise people to solve important problems collectively – is crucial to achieving results for young children. In this section, leaders from governments, international organisations and funders around the world talk about why they have chosen to put babies, toddlers and the people who care for them high on their agenda.



Leadership



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Clean air, healthy children and decent work

- ▷ Poor air quality affects children's development and their ability to contribute meaningfully to society.
- ▷ Governments should tackle air pollution to improve work, education, health and the environment.
- ▷ The UN General Assembly supports, for example, more efficient vehicles and stoves, and reforestation.

María Fernanda Espinosa
President of the 73rd
Session of the United
Nations General Assembly
New York, USA

Studies have shown that children who are exposed to poor air quality suffer from poor physical and psychological development, not only impairing their quality of life but limiting their ability to benefit from education, to engage in decent work, and to contribute meaningfully to society as a whole.

The latest state of the evidence on air pollution and children's health is surveyed in a new report by the World Health Organization, summarised on pages 138–141 of this issue. But the challenges go beyond healthcare costs and burdens. Some lasting impacts take years or decades to become evident. A recent Unicef report (2017) states:

... studies have found associations directly between air pollution exposure and cognitive outcomes, including reduced verbal and nonverbal IQ, memory, test scores and grade-point averages among school children, as well as other neurological behavioral problems.

In fact, the authors noted that one study found a four-point drop in IQ by age 5 among exposed children.

This is particularly worrisome for countries that are striving to achieve inclusive economic growth, to eradicate poverty, and to achieve the United Nations Sustainable Development Goals. When children suffer physical or psychological impairments due to air pollution, this can have serious detriments on their ability to learn and develop, restricting their access to education and their eventual participation in the job market.

In fact, it has become abundantly clear among healthcare workers and social workers that the first 1000 days of a child's life are of critical importance. This is when the brain undergoes the most rapid and, some would argue, important growth. The seeds planted during this time, the development stages that are reached, lay the pathway for all future development, easing the way for more mature human interaction, for processing memories, for controlling behaviours, etc. All efforts, therefore, must be made to ensure that children are given the opportunity to fully realise their potential during this phase, and any potential impairments, including but not limited to poor air and water quality, should be avoided or reduced.

Through my term as President of the General Assembly for the 73rd Session, I have highlighted both 'the environment' and 'decent work' as issues of critical importance. With the obvious and clear linkages between environmental impacts, access to education/work and air quality, it is important that countries, communities and private sector companies take steps to rein in this ever-growing problem, especially as it pertains to children, our most vital resource and those for whom our work matters most.

Because the challenges are diverse and many. Poor vehicle emission standards in some countries, coupled with traffic congestion; industrial plants located near housing and education facilities; a lack of affordable clean energy resulting in continuing dependence on coal- and wood-burning stoves, often inefficient ones at that; and rapid deforestation, are all factors that are affecting air quality. Underlying all these issues is the rapid rate of urbanisation, which at current rates will see nearly 70% of the world's projected 9+ billion people reside in cities by 2050.



Photo: Courtesy of Office of the President of the United Nations General Assembly 73rd Session

‘To address air pollution requires the willingness to take decisions that may be difficult in the short term but will pay off later.’

Structural changes are urgently needed. Urban planning and development initiatives must consider carbon emissions and other industrial pollutants and their proximity to homes and schools. Likewise, efforts must continue to transition families away from inefficient and highly pollutant coal- and wood-fired home heating and cooking facilities towards renewables or energy-efficient cooking stoves that not only reduce greenhouse gas emissions, but protect children and families.

And green spaces, including in urban environments, as well as large-scale reforestation campaigns, are critical to help ensure that our planet’s natural defences against air pollutants are secure and fit for purpose. An ongoing initiative in Pakistan for instance, the ‘Billion Tree Tsunami’ initiative, has already seen 1 billion trees planted ahead of schedule, with a new goal of 10 billion to be planted over three years. This initiative is being supported by nearly the entirety of the United Nations System and demonstrates respect for the role of forests in the health of ecosystems, livelihoods, and people and communities.

Finally, support for electric vehicles and better public transport must be strengthened. While the shift towards greener vehicles is well underway – and we see this in countries such as Morocco, which launched a fleet of electric buses, and in Europe, where diesel-powered vehicles will be banned in France by 2040 – more must be done to ensure cleaner air, everywhere.

It is important to note that these efforts constitute a win-win for all involved. Not only does reforestation support environmental and personal health and well-being, it creates jobs and boosts livelihoods. Similarly, for the automotive sector, investing in cleaner vehicles and better public transport can help boost innovation. Governments can ensure this shift by putting in place regulatory measures to require the production of cleaner vehicles.

While public spending and regulation are often met with some backlash, a strong public advocacy campaign highlighting the clear benefits – to decent work, to public health, and to environmental well-being – will help to facilitate support.

Key to all of this of course is a strong commitment from stakeholders – governments, public health officials, and private sector representatives – to address the challenge. This must include a willingness to take decisions that may be difficult in the short term but, much like the long-term impacts on a child’s well-being, will pay off in dividends later, even if not immediately apparent. Consistent studies and analysis of air quality will also be important, and India has taken strong steps in this regard, regularly issuing alerts when pollution is too high, while taking steps to reduce pollution and educate citizens.

At the end of the day, investing heavily in efforts to curb air pollution, water pollution and any other environmental factors that may inhibit or impair the health, potential and well-being of our children is an investment in the health, prosperity and future of every society.

→ Find this article online at earlychildhoodmatters.online/2019-1

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Early childhood development at the heart of nutrition

- ▶ Côte d'Ivoire has committed to transform its economy by investing in human capital.
- ▶ Adequate nutrition during a child's first 1000 days is key to building human capital.
- ▶ Promoting and supporting breastfeeding is a government priority in Côte d'Ivoire.

Daniel Kablan Duncan
Vice-President of the
Republic of Côte d'Ivoire
Yamoussoukro,
Côte d'Ivoire

Human capital is a country's most valuable resource, and is increasingly recognised as one of the main vectors of economic growth. As the French philosopher Jean Bodin said: 'there is no wealth but men'.

The development of Côte d'Ivoire is not conceivable if it is not taken into account. President Alassane Outtara has stated his ambition to make Côte d'Ivoire an emerging country by 2020. This includes structural transformation of the economy and increased investment in human capital. The 2012–2015 and 2016–2020 National Development Plans set out the vision of building human capital by investing in nutrition, health, social protection, education and literacy training but also by building on the collective experience of the people of Côte d'Ivoire.

At the heart of the fight against extreme poverty and the promotion of shared prosperity, Côte d'Ivoire has made human capital – and nutrition in particular – one of its priorities since 2012. The government identified the rate of stunting as a key indicator of poverty and child development. These commitments have been reaffirmed in the government's Social Programme for 2019–2020.

Côte d'Ivoire joined the Scaling Up Nutrition movement at the G8 Summit in London in June 2013. Recognising that the causes of malnutrition are multifactorial, multidisciplinary and affect many development areas, the President created the National Council for Nutrition (*le Conseil National pour la Nutrition*) in July 2014, under my coordination in my previous role as Prime Minister.

The Council is a multi-sector, multi-stakeholder platform to encourage synergy and convergence of policies and operational initiatives. It brings together public entities, private sector networks, academia and research, civil society and development partners. The Council developed the National Multi-Sector Nutrition Plan for 2016–2020, which would cost USD 470 million. It aims at 'improving the well-being of the population as a whole by guaranteeing an optimal standard of nutrition, and to provide lasting support for inclusive growth and development of the country', with particular emphasis on the most vulnerable.

The plan goes well beyond the health sector – it also engages strategic sectors such as education and literacy, agriculture, farming and fisheries, social protection, the environment and water and sanitation. It considers the vulnerability and the empowerment of women, and focuses on nutrition during the crucial window of opportunity that is a child's first 1000 days, from conception to age 2.

Investing in nutrition for young children

Together with stimulating interactions with parents and caregivers, adequate nutrition during early childhood plays an essential role in developing a child's cognitive abilities and laying the foundations for future learning, good health and productivity in adulthood.

In October 2016, I participated in a summit on 'Investing in the Early Years for Growth and Productivity', held in Washington to coincide with the annual meetings of the World Bank Group and International Monetary Fund. During this summit, I reaffirmed our commitment to make significant investments in the National Multi-sectoral Nutrition Plan to reduce stunting in children and more generally, aid optimal development.

This plan, costed at CFA francs 266 billion (USD 470 million), was discussed at a roundtable for resource mobilisation which I personally led in September 2016. The contribution of the government will account for 15% of the overall cost.

Given the scale of the challenge and the need for rapid scale-up, we developed a nutrition and early childhood investment plan with the World Bank and other donors in May 2018, and USD 50 million was committed to build the sustainable foundations of human capital in line with the needs of our economy. In addition, foundation and Power of Nutrition funding was secured totalling USD 10.4 million.

By 2022, the project will contribute to scaling-up nutrition and early childhood development interventions in half of the country's administrative regions.

'We have introduced sectoral policies to strengthen government actions as they relate to young children. The challenge is convergence and synergy.'

Action on breastfeeding and other issues

We invest in early interventions to support the critical phases of children's physical and cognitive development, and improve the lives of the most disadvantaged and vulnerable children and the society in which they live. These investments help to break cycles of poverty, violence and despair.

In parallel with this integrated policy that considers the different aspects of early childhood, we have introduced sectoral policies to strengthen government actions as they relate to young children. The challenge is the convergence and synergy of these policies.

In addition, we have put in place a legal and institutional framework for the promotion and protection of children. Côte d'Ivoire has ratified several

international treaties for the protection of children, including the United Nations Convention on the Rights of the Child of 1989, ratified in 1991, and the African Charter on the Rights and Welfare of the Child of 1999, ratified in 2002.

Over the last few years, Côte d'Ivoire has adopted specific regulatory texts with regard to promoting and supporting breastfeeding, such as decree No. 2013-416, regulating the marketing of breast-milk substitutes, and law No. 2015-532 concerning the labour code as it relates to women and child labour, the protection of maternity and child education. The year 2015 was designated Breastfeeding Year by the Government. The law offers a framework that enables breastfeeding, which we are committed to strengthen in order to give more time to women who are breastfeeding and to give every child, woman, family and community the advantages of breastfeeding.

The priority the government puts on breastfeeding is further demonstrated by its inclusion in the National Multi-sectoral Nutrition Plan 2016–2020, and the implementation of the multi-sectoral breastfeeding action plan 2019–2021. Although more than 90% of women are breastfeeding, we have a relatively low rate of exclusive breastfeeding. We have set an ambitious target of increasing this from 12% in 2012 to 50% in 2020, and we are on the right track – the latest



figure, for 2016, had increased to 23.5%. With this target in mind, we are working on scaling-up baby-friendly hospitals, strengthening the regulatory framework and involving all industries and stakeholders.

Encouraging results

The multisectoral approach to nutrition and early childhood is creating synergy by pooling efforts. Encouraging results were achieved between 2012 and 2016, and they now need to be consolidated.

According to the latest evaluations, (the MICS, annual statistics, surveys, reports on the situation of children), the mortality rate of children under 5 years old decreased from 125 per 1000 live births in 2012 to 96 in 2016 and the fertility rate decreased in the same period from 5 to 4.6 children per woman. This has been achieved in a context of the poverty rate falling from 48.9% in 2008 to 46.3% in 2015.

Regarding nutrition, the percentage of children affected by stunting fell from 29.8% in 2012 to 21.6% in 2016. As noted earlier, exclusive breastfeeding rates are rising, and figures for initiation of breastfeeding in the hour following birth with skin-to-skin contact also improved, increasing from 31% in 2012 to 36.6% in 2016.

Regarding healthcare, President Outtara's investments in upgrading infrastructure, technical equipment, human resources and accessibility are paying off. Universal healthcare coverage is a major pillar of government policy, including the principle of free healthcare for the most vulnerable groups and special attention to maternal and child health and antenatal care. The number of women who had at least one antenatal consultation increased from 91% in 2012 to 93.2% in 2016, and the number who had the recommended four consultations increased from 44.2% to 51.3%. The proportion of pregnant women who were attended by a qualified person during delivery improved significantly from 59% in 2012 to 72% in 2016. This improvement was also seen among the poorest households.

Regarding protection, the proportion of children under the age of 5 years whose birth was registered increased from 65% in 2012 to 71.7% in 2016, which should make it possible to reach the 75% target in 2020. During this period, the proportion of registered children with no birth certificate decreased from 19.5% to 12.2%.

When it comes to early learning, the government of Côte d'Ivoire recognises the need to follow up investments in a child's first 1000 days with access to pre-primary education to ensure continuity of development. Pre-primary education has been proven to provide children with the skills needed to succeed in school, but less than half of children aged 3 to 5 years old have access to it in the world. In sub-Saharan Africa, according to UNESCO, this rate falls to 20%.

'We are committed to give every child, woman, family and community the advantages of breastfeeding.'

‘One of the challenges is to ensure that the system operates at an optimal level of performance in every municipality.’

In Côte d’Ivoire, 14.3% of children aged 3 to 5 years old are currently receiving pre-primary education. In order to get this ratio up to 30% in 2025, the government has decided to build preschool classes into all new and refurbished school buildings. Additionally, the Education Services Improvement Project (*Projet d’amélioration des prestations des services d’éducation*) with a budget of USD 43 million, will install 117 community preschools between 2018 and 2022.

Significant challenges are still to be met in all these areas. We must reinforce the gains mentioned above and fortify our efforts to scale-up the various projects that are currently underway. The legal framework must also be strengthened and existing measures effectively implemented. Furthermore, competences were transferred to relevant territorial levels by a law passed in 2012, and one of the challenges is to ensure that the system and cross-sectoral work operate at an optimal level of performance in every municipality in the country.

We know we can continue to rely on all our partners that work in the fields of nutrition and early childhood, and we are grateful for their support in order to offer dignity and a better tomorrow to hundreds of thousands of children.

➔ Find this article online at earlychildhoodmatters.online/2019-2

Solid Start: supporting municipalities to tailor solutions for children's first 1000 days

- ▷ Each municipality in the Netherlands is responsible for developing policies on early childhood.
- ▷ Solid Start is a collaboration among municipalities, civil society and national government.
- ▷ Municipalities can exchange lessons learned and adapt best practices to their local conditions.

Hugo de Jonge
Deputy Prime Minister
and Minister of Health,
Welfare and Sport
The Hague,
the Netherlands

Launched in 2018, the Solid Start programme (Kansrijke Start) supports municipalities in the Netherlands to improve services in the first 1000 days of a child's life. It is part of broader reforms in which social care services previously provided by the national government are now being delivered by municipal governments. In this article Hugo de Jonge explains to *Early Childhood Matters* what was the thinking behind the programme and how it is progressing so far.

- ▷ *In 2015, the national government decentralised social policy to municipalities. How has this worked out? Have there been more disparities in service provision across municipalities than had been anticipated? Is this seen more as a cause for concern or as an opportunity for learning and disseminating best practices?*

Basically, the reform of long-term care is about boosting social participation – helping citizens to become more self-reliant and manage their own lives. We aim to achieve this by enabling older people to live independently for as long as possible, by fostering a more caring society and by tackling loneliness.

Municipalities have been given the tools to tailor their own solutions, because one size does not fit all. The legal framework that delegates broad policy powers to municipalities is not without obligations. It indicates what they must consider when assessing an individual application for care. If a person can't look after themselves and has no network, the municipality must take action. The law prescribes how the municipality should decide what a person needs in order to live independently and participate in society, but not how that support should be provided. While policy differences between municipalities are inherent, they are no greater than we had anticipated. This is the desired outcome of our policy. A judicial review of the framework was recently carried out, and as a result parts of the policy have been adapted.

Municipal policy on how clients pay for services also varied considerably. Here, the government has intervened. This year we've introduced a fixed-tariff system so that clients don't have to pay separately for each service. This ensures that the care and support they need is available and affordable. The

fixed-tariff system makes the practical implementation much simpler, too. It cuts out red tape, and results in a more streamlined process with fewer errors.

In short, this massive transition takes time, and we need to discover what works and what doesn't. It's an ongoing process. As the Netherlands Institute for Social Research (SCP) commented in its evaluation of the 2018 reforms, we're heading in the right direction but we aren't there yet.

▷ *Where did the impetus for the Solid Start initiative come from? What have been the challenges in developing it to the current point and how have they been overcome? Does it command support from across the political spectrum?*

'To achieve substantial improvement in local service provision we need agreements that transcend the various parties.'

The first 1000 days of a child's life are crucial to their later development. You only get one chance at a solid start. Fortunately, the Netherlands has a good healthcare system and infant mortality is falling. But 14% of babies still have a less than favourable start at birth, either because they are premature, or their birthweight is too low, or a combination of both. These problems have an impact on their health and development when they are young, and also when they're older. Children born to women living in socially deprived neighbourhoods are at greater risk, due to differences in lifestyle, nutrition and social environment. Scientific research has identified the consequences and makes it clear how important it is to tackle the causes together. For all those children yet to be born, we can still do 1000 things to give them a solid start and make sure they get the best opportunities in the first 1000 days of their life.

That's why it's vital that all the parties involved in helping pregnant women and young children – in the medical, public and social domains – work together. Actually, several municipalities in the Netherlands have been working to improve service provision for some time already. And they've shown that it can be done. So Solid Start doesn't have to start from scratch – it builds on the know-how already acquired in the parts of the country that are forging ahead.

▷ *How has been the experience of working in a partnership of national government, municipality and civil society organisations – is this a model with which you have had much previous experience?*

Solid Start was launched only a few months ago. But, generally speaking, its success depends to a crucial extent on effective collaboration between central government, municipalities and civil society organisations. The initiative addresses the concerns shared by all parties and can therefore count on broad support. As part of central government, we can put the desired change on the agenda, for instance through public communications and campaigns. We can foster it through financial incentives to municipalities to form local coalitions. And we can facilitate it by sharing good practices and preventing each local coalition from reinventing the wheel. But ultimately, our goal is to achieve

substantial improvement in local service provision. That is where we need agreements that transcend the various parties. It must be clear who identifies risks, at what stage they should do so, and who then makes the referral. In addition – assuming the risk can be identified in time and the client gets a suitable referral – appropriate interventions must be available locally to support and protect vulnerable pregnant woman and/or young children. Only then will children get the solid start they need.

All these parties' involvement in implementing the Solid Start programme is based on their own remit and expertise. They can report any obstructions they encounter at local level to the central programme. This enables us to take the right corrective measures at national level.

- ▷ What are some of the current problems in the Netherlands in delivering services to families across a child's first 1000 days? How will the Solid Start initiative approach make them better?



Photo: Courtesy of the Ministry of Health, Welfare and Sport, the Netherlands

Some potential problems can be directly linked to risk factors. For example, if the parents-to-be spend the pregnancy in constant stress due to debt or poor general health, if they are overweight or underweight, if they smoke or drink, or if there is domestic abuse or violence involved, it's a known fact that this will adversely affect the child and their development. In addition, the absence of protective factors such as a social network can exacerbate this.

In the current situation a maternity assistant or midwife, for instance, could come across a situation like this and not really know how to deal with it. After all, the root causes are not only medical. In such cases, it's essential to have local agreements in place. That is one of the priorities of Solid Start.

The 'handover moments' in the system could also benefit from improvement. A vulnerable pregnant woman may be effectively monitored during the pregnancy and postnatal period, and then vanish off the radar. It's vital that the person who identifies the problem is not by definition responsible for solving it, but ensures an effective handover and refers the client to the neighbourhood social support team and youth care services. Finally, it's also very important to transfer relevant data so that other professionals can monitor the child's development and provide timely extra support when necessary.

'We draw on know-how from municipalities with relevant experience, while ensuring that new municipalities can also benefit.'

▷ *What has happened since the initiative was launched? Has anything been surprising? What are the ambitions for the future? What are the major opportunities and challenges you foresee?*

Since the Solid Start programme was launched, we have worked closely with our partners in the field and jointly drawn up a detailed scenario for implementation. The main focus is on identifying the steps we must undertake in order to reach our common objective. Various steps have already been taken, focusing on the period preceding pregnancy, the pregnancy itself and the weeks and months after the birth. We have also put monitoring in place to enable us to see whether we are achieving our aims and make timely adjustments if and when necessary. We draw on know-how from municipalities with relevant experience, while ensuring that municipalities who are new to the venture can also benefit. This avoids everyone reinventing the wheel. An overview is also kept of all available and successful interventions.

Towns and cities where the problem is most urgent have been designated as 'GIDS' (Gezond in de Stad, literally 'healthy in the city') municipalities. These selected municipalities can apply for financial resources to set up a local coalition. Funds are available for 80 such GIDS municipalities in 2019 and we expect a full take-up. There will also be a nationwide support programme for all participating municipalities (including those not shortlisted as urgent).

▷ *How straightforward is it to transfer good practices from one municipality to another? How much greater are the challenges in transferring good practices across national borders?*


There is no doubt that municipalities can exchange and share lessons learned. Equally, interventions that have been successfully developed in one region can be used in another, provided there is a clear description of the target group and the implementation strategy. We're already doing this all over the country. But there will never be a blueprint for spreading 'best practices'. It's vital that local coalitions tackle the specific issues prevalent in their region. This requires a tailored approach that takes account of the extent of the local problem (in terms of statistics and insights), the extent to which parties are working in close cooperation, and the specific local culture. For example, the problems in the northern province of Groningen, with its rural communities, population shrinkage, advanced demographic ageing and independent-minded inhabitants, are completely different from those in, say, Rotterdam, where there are certain neighbourhoods with a high concentration of poverty and various ethnic minorities requiring separate strategies. So it's important that we, as part of central government, give local partners the scope to offer tailor-made solutions.

And this same approach could work well internationally. In practical terms, it boils down to close collaboration within the network around the vulnerable pregnant woman and her child. How this is fleshed out in practice will depend on the local challenges and culture.

➔ Find this article online at earlychildhoodmatters.online/2019-3

- ▷ The Mayor and other municipal leaders in Recife have prioritised young children.
- ▷ In 2018, Recife launched a legal framework for early childhood development.
- ▷ Initiatives in Recife include antenatal care and child-friendly public spaces.





Early childhood: why we need to invest in the future of cities

Geraldo Júlio

Mayor

Recife, Brazil

Across Brazil, 18 million children live in households with insufficient income. And 14 million lack assurance of at least one fundamental right, such as access to health and quality education, housing, sanitation and protection against violence, according to the latest National Household Sample Survey (*Pesquisa Nacional por Amostra de Domicílios, PNAD*) in 2015.

This survey also shows that in Pernambuco State more than 60% of boys aged under 14 years live in households where the monthly income is less than half the minimum wage, and more than 280,000 under-18s live in *favelas*, where social vulnerability causes numerous problems. With 1.6 million inhabitants, Recife is not only the capital of Pernambuco State but also the biggest city in the North-east – the poorest region of Brazil, affected by many social inequalities.

In this context, low-cost and scientifically proven public policies are more than a choice, they are a necessity. In recent years, scientific studies have demonstrated how great the long-term returns are from investing public money in early childhood. Research by the NCPI (*Núcleo Ciência Pela Infância*, Science for Childhood Working Group), which includes institutions such as Harvard University and the Bernard van Leer Foundation, attests that the

better the conditions in a child's first three years in particular, the greater the likelihood that they will develop their full potential in adulthood.

As the city's Mayor, along with several members of my staff who are leaders in strategic areas related to early childhood, I participated in the Executive Leadership Programme on Early Childhood at Harvard University. This helped create shared knowledge about the subject among the top decision makers in the city's administration, giving it the prominence it deserves.

It is not possible to improve young children's quality of life by focusing on the redistribution of income alone. The problem is much broader. We must invest in public policies specifically directed at children in several different areas. In order to guarantee social protection, well-being and quality of life for children, we need to implement projects that promote the improvement of children's living conditions in terms of health, education, social assistance and human rights. Above all, we need projects that enhance children's emotional development.

'It is not possible to improve young children's quality of life by focusing on the redistribution of income alone.'

Across Brazil, more attention is being given to early childhood. In the run-up to national elections in 2018, for example, Unicef launched the campaign 'More Than Promises: a Real Commitment to Children and Adolescents in Brazil' to focus debate on structuring policies on prevention, education and improvement of community infrastructure that would have a positive impact on the reality of young citizens.

We chose early childhood as a priority in Recife because we believe it can be an effective investment to heal some of the social wounds that have been affecting our city. We have already implemented a comprehensive public policy for urban security focused on the prevention of violence and the dissemination of a culture of peace, which particularly benefits vulnerable children.

The Legal Framework for Early Childhood

To ensure that the early childhood agenda is never forgotten in the city, regardless of who is in power, last year we launched the Legal Framework for Early Childhood, which establishes principles, guidelines, instruments and competencies for formulating and implementing public policies that guarantee the physical, emotional and social development of children from birth to the age of 6 in Recife, and that safeguard the rights of pregnant women.

This law resulted from surveys and debates that started in 2017, involving all ten of the municipal secretariats with administrative responsibilities that pertain to young children and families. Covering 14 areas, the Framework integrates more than 200 policies, programmes and projects, such as 'Programa Mãe Coruja' (the Mother Owl Programme), which was introduced by the State Government and implemented by us in Recife; Recife Women's Hospital; and the School of the Future programme, to improve the quality of city schools and daycare centres.

A major step for effective implementation was the establishment of an inter-sectoral steering committee within the Legal Framework for Early Childhood, coordinated by the Planning and Management Secretariat. Under my supervision as Mayor, they are responsible for carrying out these transversal policies on early childhood. Their objective is not only to ensure access to education or healthcare, but also to work towards children's integral personal development, considering especially the importance of quality interactions with caregivers.

Individual initiatives are monitored through follow-up meetings of all secretaries in the city administration, not only the ten who participated in the preparation of the Early Childhood Legal Framework. Deadlines and people responsible are clearly defined, and deliberations are recorded in minutes taken by the Planning and Management Secretariat.

Baby Week and other initiatives

In order to make different sectors of city management aware of the importance of caring for children, the municipal administration has sponsored Recife Baby Week for four years, in a partnership with Unicef. Baby Week opens discussions and promotes activities in healthcare centres, daycare centres and municipal schools, parks, and other public and private spaces throughout the city. As a social mobilisation strategy, it aims to strengthen initiatives carried out in the municipality regarding care, promotion, prevention and assistance for children in terms of health, education, social development and human rights.

'We believe early childhood can be an effective investment to heal some of the social wounds affecting our city.'

Along the same lines, another important event carried out by the city is Play Week, which raises awareness of how play contributes to the integral development of children. To further stimulate play and reading, more than 200,000 children's books were delivered to the libraries of schools and daycare centres, and given to 17,000 preschoolers to take home. In 2017 and 2018, about 40,000 educational board games and toys were distributed to be used in municipal school playgrounds.

Another noteworthy initiative is the set of activities conducted at the Peace Community Centres (Compaz) in the neighbourhoods of Alto de Santa Terezinha and Cordeiro, with the objective of supporting social inclusion and citizenship, strengthening communities and promoting a culture of peace. The centres have a library and areas for sports and courses, among many other activities that benefit children as well as adults.

Adjusting public spaces so that children under 6 years of age can play and interact socially is also one of the main concerns of the present administration. For this urban renewal, we have signed another partnership with the Bernard van Leer Foundation, through which we are investing BRL 3.5 million (about EUR 810,000) in urban interventions in the neighbourhoods of Alto de Santa Terezinha and Iputinga. The project includes improvements to street lighting,

strategic reduction of vehicle speed limits, making footpaths more accessible and renovating squares. We agree with the Foundation's argument that a city that is good for pregnant women, babies, children and young people can produce stronger and more sustainable communities.

The Recife Mãe Coruja Programme monitors pregnant women during the prenatal period and their children in the first years of life, as a public policy to reduce infant mortality. At the moment, there are 1911 pregnant women registered with the programme and 6945 children. In addition to distributing items such as a baby bath, nappies, soap and nappy rash ointment, the Mãe Coruja Programme has become an excellent way to convey the significance of caring for children's integral development, since breastfeeding and paediatric care are not all a small child needs.

In December 2018 more than 250 mothers received certificates after attending the Affection Generation project, which stimulates affectionate relationships between families and their babies in the first years of life, beginning in pregnancy, to help children's intellectual and emotional development. In about 50 workshops conducted using coaching techniques, mothers participated in group discussions and activities, and received personalised follow-up.

'The Legal Framework for Early Childhood establishes principles that aim to combine efforts through inter-sectoral action.'

The City Plan for Early Childhood

There can be no doubt that attention to children is not just a campaign promise in the capital of Pernambuco State. It is demonstrated by the more than 200 policies, programmes and projects that the City of Recife has developed for children, Pernambuco's pioneering spirit in elaborating its Legal Framework for Early Childhood, and the City Plan for Early Childhood, to be launched this year as guidance for related initiatives that are still in the pipeline for implementation. We have made a firm commitment to the young citizens of Recife – future great men and women who will contribute to building an ever-better city.

The Legal Framework establishes a series of principles whose aim, above all, is that our secretariats combine their efforts through inter-sectoral action on projects, programmes and initiatives that are still to be created or that already exist. Respecting human dignity, valuing life, strengthening family and community ties, promoting gender equality, and providing access to public spaces and services are some of the underlying principles that guide the preparation of our City Plan for Early Childhood.

This inter-sectoral aspect is present in projects such as Affection Generation and Mãe Coruja, which are under the Secretariats of Social Development and Human Rights and of Health, respectively. Both have the fostering of family relationships as the core element in their activities. They complement and leverage each other, reaching all the neighbourhoods of Recife, with special attention to more socially vulnerable families.

➔ Find this article online at earlychildhoodmatters.online/2019-4

Little lungs, not polar bears: the new face of climate change

- ▷ Air pollution and greenhouse gas emissions often have the same causes, and solutions.
- ▷ Children breathing toxic air is a more immediately obvious problem than climate change.
- ▷ CIFF invests in tackling climate change by addressing air quality to improve children's health.

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The quintessential image of the polar bear balancing on a melting ice cap has become an out-of-touch and outdated image of climate change. It presents it as a foreign issue: one that affects other species in other places. In contrast, air pollution has a devastating impact on health in a more immediate and local way. With common solutions to both pollution and climate, perhaps our health – and particularly the health of our children – can be the catalyst we urgently need to accelerate our shift to a net-zero world.

At the Children's Investment Fund Foundation (CIFF), we are one of the largest philanthropic foundations supporting ambitious work on climate change. For us, intergenerational injustice is central to why we – a philanthropy focused on children – invest so heavily in climate. The long-run negative impacts of climate change on health have been clearly stated; it is now ten years since *The Lancet* described climate change as 'the biggest global health threat of the 21st Century' (Costello et al., 2009).

The links between climate breakdown and health – especially the health of our children – are as extensive as they are worrying. We know that climate change will cause patterns of communicable diseases to shift, undermining efforts to eradicate deadly diseases like malaria and dengue fever (Patz et al., 2003). At the same time, some of the most productive tracts of agricultural land risk becoming harder to cultivate, with worrying implications for food security. The links between a warmer planet and frequency and severity of extreme weather events are compelling, as is the likelihood that this leads to mass displacement and unrest. Yet, despite this, global CO₂ emissions continue to rise (Harvey, 2018).

Why linking climate change and child health around toxic air makes sense

Collectively, we're failing to address climate change, but addressing air pollution can help to change this. The reasons for this collective failure are complicated, but part of it comes down to human psychology. The risk of climate change can feel too big for one person to deal with, too long-term to seem a real problem for us today. Compare this to air pollution. Toxic air couldn't be more proximal: it enters our lungs, stings our eyes and makes us wheeze.

Some of the impacts, like the way that lung cancer is transforming from a smokers' disease to an urban one, can take years to manifest. Others can be far more immediate, undermining health today.

This was vividly illustrated by the tragic case of 9-year-old Ella Kissi-Debrah, who tragically died after a fatal asthma attack that occurred during a period of illegally high levels of air pollution. Ella lived within 25 metres of one of London's most polluted roads. Over a period of three years, she was admitted to hospital with breathing difficulties 27 times, with all but one visit coinciding with peaks in air pollution levels. As with climate change, children like Ella are at the greatest risk from air pollution, and especially the youngest, whose brains and lungs are developing most rapidly.

Fortunately, the sources of air pollution are very often also the sources of greenhouse gases: transport, power and heavy industry. Energy production – the main driver of greenhouse gas emissions through the burning of fossil fuels – causes 85% of airborne particulate pollution and almost 100% of sulphur and nitrogen oxide emissions (International Energy Agency, 2016).

The solutions to climate and air pollution, therefore, are often the same. By tackling one, we can tackle both. At ClIFF, we are building partnerships to bring together the issues of child health and the environment. We're already seeing how bridging communities of academics, activists and policymakers can accelerate positive change.

Air pollution has a devastating impact on children, but receives insufficient attention

As readers of *Early Childhood Matters* will be acutely aware, early childhood lays the foundation for later life, impacting learning, earning and happiness. However, despite the compelling evidence, the health of babies and toddlers continues to be neglected by donors and governments globally.

The impact of air pollution on health starts from the moment of conception. Toxins inhaled by the mother travel through the placenta and undermine foetal development (Fleischer et al., 2014). Then the damage continues after birth: young lungs breathe two to three times faster than adults and are often closer to the ground where air pollution is more concentrated (Sharma and Kumar, 2018). Adverse health impacts range from neurodevelopmental disorders to asthma and childhood cancers.

The latest research from the World Health Organization (WHO, 2018) on linkages between air pollution and child health (as summarised on pages 138–141 of this issue of *Early Childhood Matters*) makes for depressing reading: for example, air pollution accounts for almost one in ten deaths in children under 5 years old, and 98% of children under 5 in low- and middle-income countries are breathing PM2.5 levels above WHO guidelines. As stated by WHO Director-General Tedros

'The links between climate breakdown and health – especially the health of our children – are as extensive as they are worrying.'

Adhanom Ghebreyesus: 'polluted air is poisoning millions of children and ruining their lives. This is inexcusable.'

Like climate change, air pollution is an issue which continues to receive insufficient attention – although it is heartening that María Fernanda Espinosa is making this a signature issue for the United Nations General Assembly (see her article on pages 10–13). Environmental health is often seen as a sub-speciality rather than core to child public health. Critical conversations about transport policy and town planning occur largely without health expertise and inputs. Consequently, it is only very recently that the issue has been given the prominence it deserves.

Child health brings a new face and new resources to climate change

The physical proximity and visible urgency of air pollution help to bring attention and create common ground on which we can all agree. After all, who is not concerned about rising asthma in urban children (Asthma UK, 2018), or the



Photo: Courtesy of Nick Otto/ Singularity University

toxic air which at times forces Delhi schools to shut? This can shift the debate from being about *whether* to act, to *how* to act. At the same time, child health brings new, trusted voices to the debate, including doctors, influential and engaged parents, and a new community of academics.

In addition, strong and growing activist movements, which have helped to shape the climate debate, have a lot to bring to the at times overly technical and cautious public health community. Linked to this is the application of tools like litigation, power mapping and political economy analysis, and strategic communications which are, if not new, certainly underused in public health.

We hope that emphasising the overlap between child health now and climate change over the long term can unlock greater resources, particularly from philanthropy.

‘With the Clean Air Fund, we hope to build stronger allegiances with diverse funders to accelerate action.’

Climate change has for too long been far down the priority list of philanthropists. For US and UK foundations, it is estimated that less than 2% of philanthropic funding is spent on climate change (*Alliance Magazine*, 2016), whereas health is undeniably a greater focus for traditional philanthropy. By making the links between climate change and health clearer – starting with air pollution – we hope to start to leverage new funders to environmental risks in order to deliver the win-win of improved health and accelerated decarbonisation.

In light of this, CIFF are supporting the Clean Air Fund, a transformational new philanthropic fund which is raising USD 100 million to tackle air pollution for the good of our children, our health and the climate globally (see box). We hope to build stronger allegiances with diverse funders to accelerate action and see real change in the short term.

The child health community must act on the very real and current threat that air pollution and climate bring to children’s health. We can do much more: pushing for greater awareness of air pollution in our urban planning. We can support institutions like the WHO that are putting considerable effort into tackling climate and environmental determinants of health. We can use the voice of our children to uplift ambition through existing climate channels, such as the global COP conferences. And we can work locally too: with parents, schools, nurseries and children to raise awareness and motivate stronger action within communities.

Our children will not forgive us if we fail to prevent climate breakdown. If the predicted – if still hard to imagine – impending planetary crisis comes to fruition, they’ll be right not to. Poisoning our babies and toddlers by treating the air we breathe as an open sewer is equally unforgivable. The problem of toxic air pollution can inspire action in a way that the threat of climate breakdown so far has not. The solutions to both problems overlap considerably, which is why we need to replace the polar bear – the traditional face of climate change – with the face of a child.

The Clean Air Fund

Foundations focused on children, health and climate change are working together to establish a joint initiative called the Clean Air Fund to address the urgent need for greater collective action. By tackling air pollution together, significant improvements can be made in the short term to human health and accelerated decarbonisation.

The Clean Air Fund will pool and deploy philanthropic resources to:

- **make grants to charitable projects**, deploying philanthropic capital and supporting the deployment of capital from others (e.g. development agencies)
- **increase the scale of funding** currently targeted towards this issue, by tying together resources from funders interested in climate change, environment and health
- **ensure a holistic approach across delivery organisations**, by integrating expertise from different sectors, sharing best practice and connecting partners
- **lead a collective philanthropic strategy** to ensure that interventions are made where philanthropic funding can have the biggest impact, to align resources with other programmes and to reduce duplication.

➔ Find this article online at earlychildhoodmatters.online/2019-5

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The Scaling Up Nutrition (SUN) Movement: striving for impact at scale

- ▶ World hunger is rising. Scaling Up Nutrition is a platform for collaboration to reduce stunting.
- ▶ Ethiopia, Zambia, Bangladesh and Kenya show that committed governments can reduce stunting.
- ▶ Improving nutrition also demands smart investments and multi-sectoral, multi-stakeholder ways of working.

Gerda Verburg

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In 2019, I do not think we need to talk about ‘why’ when it comes to scaling-up nutrition. We are far beyond that. According to the report *The State of Food Security and Nutrition in the World 2018*¹, for the third year in a row there has been a rise in world hunger. The absolute number of undernourished people, that is, those facing chronic food deprivation, has increased to nearly 821 million in 2017, from around 804 million in 2016. However, at least ten countries have managed to reduce the prevalence of stunting between 2015 and 2017. This shows us that where there is a will, there is a way.

But progress is too slow, with causes not just linked to diet, but challenged by conflict and climate-related shocks and stressors that have aggravated hunger and malnutrition in many countries. At the same time, overweight, obesity and chronic diseases are increasing, creating a double – or triple – burden of malnutrition. Malnutrition is expensive: it erodes and undermines the prosperity of women, men, their families and nations; it impairs children’s brains and bodies, thereby impacting their health, education and productivity in the future.

It is then crucial to focus on the ‘what’ and the ‘how’ – when it comes to scaling-up nutrition, for impact and results at scale. In my view, there are three key ingredients that comprise the ‘recipe for success’:

- government ownership
- multi-sectoral and multi-stakeholder collaboration for aligned implementation, and
- investment.

Government ownership

Today, 60 countries and four Indian states drive the SUN Movement. Through their experience, we have seen that government ownership, commitment and leadership over the nutrition agenda have together proven to be the only sustainable way to drive down stunting and unlock the potential of people, societies and nations.

Since joining SUN, **Ethiopia** has seen a 20% drop in child malnutrition. At the root of this success, you will find a government’s sustained commitment, and the impressive progress achieved in reducing poverty and expanding investments in basic social services. The government has started to integrate nutrition-related

¹ *The State of Food Security and Nutrition in the World 2018* was jointly prepared by the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD), the United Nations Children’s Fund (UNICEF), the World Health Organization (WHO) and the World Food Programme (WFP).

actions into various initiatives, coordinated by the Ministry of Health, as well as into its agricultural programmes. Most notably, nutrition was integrated into the fourth phase of the country's Productive Safety Net Program (PSNP) in early 2016. PSNP, led since 2005 by the Ministry of Agriculture, is one of the largest social protection programmes in sub-Saharan Africa, and aims to improve food security and nutrition for more than 8 million people who participate in public works in return for food or cash.

Zambia can be proud to say that they have one of the world's highest exclusive breastfeeding rates, at 72.5% between a baby's birth and when she or he is 5 months old. Much of this success is because of legislation and policies that strive to ensure an enabling environment for women to better combine work and family. For instance, Zambian legislation provides for 120 days' maternity leave for workers considered vulnerable. Today 13 SUN countries, mostly East and Southern African nations, can boast exclusive breastfeeding rates of above 60%.

Bangladesh, an 'early riser' in the SUN movement, joining in 2010, has made significant strides to take forward nutrition policy and programmes multi-sectorally through the revitalisation of the Bangladesh National Nutrition Council (BNNC), the apex policy and coordination body, with the Honourable Prime Minister as the Chair. There is also a costed, ten-year second National Plan of Action on Nutrition (NPAN2) for 2016–2025. In Bangladesh, the SUN Movement has influenced the government to increase its commitment on nutrition and has catalysed unique networks for multi-stakeholder collaboration involving civil society, development partners, and United Nations agencies.

Kenya officially joined the SUN Movement in August 2012, signalling the country's commitment to undertake coordinated actions to improve nutrition. Concurrently, the country launched the first National Nutrition Action Plan (NNAP 2012–2017) and adopted a set of 11 High Impact Nutrition Interventions targeting the critical first 1000 days of a child's life. Today, Kenya is the only country on course towards attainment of all World Health Assembly targets for nutrition. The diverse range of factors that have contributed to a reduction in stunting lend credence on the effectiveness of the multi-sectoral approach.

It is clear that political ownership and commitment, translated into robust policies, plans and legal frameworks, are a large contributor to this impact. Leadership most often starts from the top, and when it comes from the highest level of government, such as President or Prime Minister, it can make a big difference. Political figures have the power to convene key sectors and stakeholders and ensure a whole-government approach in tackling the drivers of malnutrition – such as lacking gender inequality, lacking investment in education, or nutrition-blind agricultural actions. What I have learned, as a Minister of Agriculture, Nature and Food Quality in the Netherlands and in subsequent roles, is that political commitment does not simply exist or come about accidentally. Quite the opposite: it can be created and strengthened over time – through strategic action.

'Government ownership, commitment and leadership are the only sustainable way to drive down stunting.'

Multi-sectoral and multi-stakeholder collaboration and implementation

Agreement around national and common results helps to shape multi-sectoral and multi-stakeholder ways of working. A large increase has been seen in the number of SUN member countries with national nutrition plans in place: 42 countries bring together sectors and stakeholders in a whole-government approach to address malnutrition. Further to this, SUN countries are increasingly coming together to look at progress and set priorities for the future. Between April and August last year, 54 SUN countries assessed their own performance in scaling-up nutrition, in the yearly Joint Assessment exercise. This is the highest number ever. This exercise, a unique feature of SUN, brings out an interesting overview of how stakeholders and sectors work together at national and sub-national levels: 55 SUN countries – four more than in 2016–2017 – have an active multi-stakeholder platform at the national level. In 33 countries these platforms also work at the sub-national level, supporting local actions and implementation, across sectors such as women's empowerment, agriculture, water and sanitation, health, social protection and education.

Government ownership and collaboration between departments of health, education, agriculture, social protection, economic development and finance, as well as results-focused multi-stakeholder nutrition plans, are the game-changing factors for structural impact. There must be sufficient domestic investment and a reliable data system to support this.

Investing in nutrition: not just right but smart

Nutrition is central to sustainable development. Good nutrition is not just an outcome of development, but also a driver of human development and economic growth. Better-nourished populations, starting with children, do better at school and are eventually more economically productive, and the world's future economic success lies in increasing human capital. Human capital is an



Photo: Courtesy of SUN Movement Secretariat

important determinant of labour productivity and raising labour productivity lies at the heart of raising incomes. To use the words of my friend Akinwumi Adesina, President of the African Development Bank, developing Africa's 'grey matter infrastructure' through multi-sectoral investments in nutrition is the best way to ensure children are able to grow today and lead in the future.

It is estimated that today 4% of general government expenditure across SUN countries goes towards nutrition-relevant actions. In 2016, only Comoros invested more than 5% of its national budget in good nutrition. However, many countries, such as Côte d'Ivoire, have made great progress in matching their government-driven financing with that of development partners.

No country in this world can afford a GDP loss of between 3% and 16% each year – the actual cost of malnutrition. On the other hand, actions to reduce chronic undernutrition are excellent investments; for a typical country, every dollar invested in reducing chronic undernutrition in children yields a 16-dollar return.

Alongside this, the smartest bets to prevent all forms of malnutrition are investing in both nutrition-specific and nutrition-sensitive interventions and supporting a paradigm shift from the traditional sector-driven approach to nutrition and food security through a stronger multi-stakeholder and multi-sectoral approach. This should embrace all components of food systems and enhance their capacity to deliver healthy diets to all, protecting people and planet alike.

To ensure further impact during the first 1000 days of a child's life, there is a need to:

- keep political attention high in the offices of Presidents and Prime Ministers
- scale-up cost-effective actions for gender equality and nutrition-sensitive and sustainable food systems, as well as leveraging the contributions of multiple sectors
- make the investment case with Ministers of Finance to increase domestic nutrition investments
- look towards innovative sources of finance, such as private revenue and multilateral instruments, for example the Global Financing Facility (GFF).

As a platform for collaboration and inspiration for 60 countries and four Indian states, the SUN Movement is focused on growing as a unique space to support action for investing in children. Raising good nutrition during the first 1000 days of a child's life, to prevent stunting and wasting as well as obesity, as a political priority will not only ensure it is globally recognised as a foundation for children to reach their full physical and cognitive potential, it will also catalyse the implementation of the 2030 Agenda and the eventual attainment of all 17 of its Sustainable Development Goals.

➔ Find this article online at earlychildhoodmatters.online/2019-6

'For a typical country, every dollar invested in reducing chronic undernutrition in children yields a 16-dollar return.'

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There are many pathways to scale – taking a successful small programme, and making it work for hundreds of thousands of children – but the challenges are complex. In this section, practitioners and policymakers explore issues such as coordinating across different parts of government, financing, recruiting and training large numbers of workers, testing and learning, and putting systems in place that deliver consistent, cost-effective quality.





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Giving newborns the best start: scaling-up interventions to increase early initiation of breastfeeding in South East Asia

- ▶ *Alive & Thrive is working with partners and hospitals in Vietnam to increase early breastfeeding rates.*
- ▶ *If breastfeeding starts within one hour of birth, it is much more likely to continue.*
- ▶ *Harmful norms and unsupportive health facilities hold back early initiation of breastfeeding.*

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Breastfeeding is key to child survival, particularly in low- and middle-income countries, and important for optimal child growth and development worldwide. Starting breastfeeding within one hour of birth (known as ‘early initiation of breastfeeding’, or EIBF) offers the infant and mother the best chance for success with breastfeeding, and makes it more likely that the infant will be exclusively breastfed (no other liquid or food) for the recommended first six months.

Both EIBF and exclusive breastfeeding for the first six months reduce infant deaths. Breastmilk has all the nutrients and calories babies need, and the very first milk, colostrum, has essential antibodies and other immune factors that help the newborn’s intestinal development and prevent infections (Victora et al., 2016). Starting late, even if within the first day but not in the first hour, can endanger the life of an infant. If breastfeeding is withheld for more than a day then that risk doubles (Smith et al., 2017). When mothers do not initiate breastfeeding early, chances are poor that the infant will breastfeed exclusively for the recommended six months, or breastfeed at all (Morse et al., 1990).

Unfortunately, less than half of infants (42%) worldwide start breastfeeding within one hour of birth (Unicef and World Health Organization, 2018). The reasons for this are cultural and social, such as harmful norms that encourage mothers to discard colostrum and use other foods in the first day or days, such as honey, sugar-water, cow’s milk, or herbal pastes (Sundaram et al., 2016). Also, hospitals and health facilities often do not support EIBF, which requires early and frequent skin to skin contact and keeping the mother and infant together. Facilities may follow outdated practices of giving sugar-water to newborns, and/or provide breastmilk substitutes (BMS), despite the International Code of Marketing of BMS which prohibits this practice.

EIBF is (or should be) a practice that is relatively easy to implement because it does not have to be sustained day after day as is the case with exclusive breastfeeding for six months. A mother either does it as soon as the baby is born, or not. Also, women do not usually give birth alone, no matter where they are. Giving birth in a health facility, the norm for many countries today, provides the assurance that the mother is likely to have a skilled birth attendant with her.

These skilled birth attendants, since they work within an institution, are easy to reach with guidance, coaching and supportive policies.

Scaling an EIBF approach in Vietnam

Alive & Thrive (A&T), is a global nutrition initiative that has been working to improve breastfeeding (and other maternal, infant, and young child) practices since 2009.¹ From 2009 to 2014, the initiative demonstrated that it was possible to improve breastfeeding at scale in three different contexts: Ethiopia, Bangladesh and Vietnam (see Figure 1). Guided by its now-proven framework for implementing infant and young child feeding at scale (see Figure 2), A&T reached millions of mothers with children under 2 years of age through a combination of policy advocacy, interpersonal and mass communication, and community mobilisation on infant and young child feeding. Systematic measurement, learning, and evaluation were also essential; data drove advocacy, and motivated decision makers.

1 For further information about Alive & Thrive, please visit: www.aliveandthrive.org

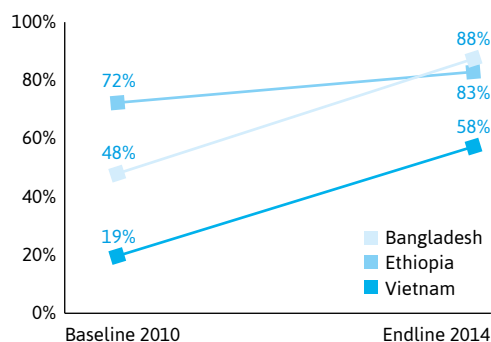


FIGURE 1
Rapid, large-scale improvements in breastfeeding are possible

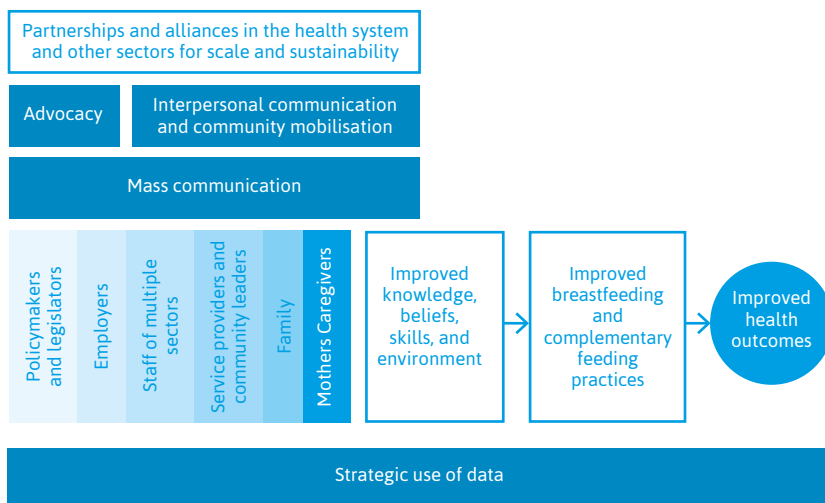
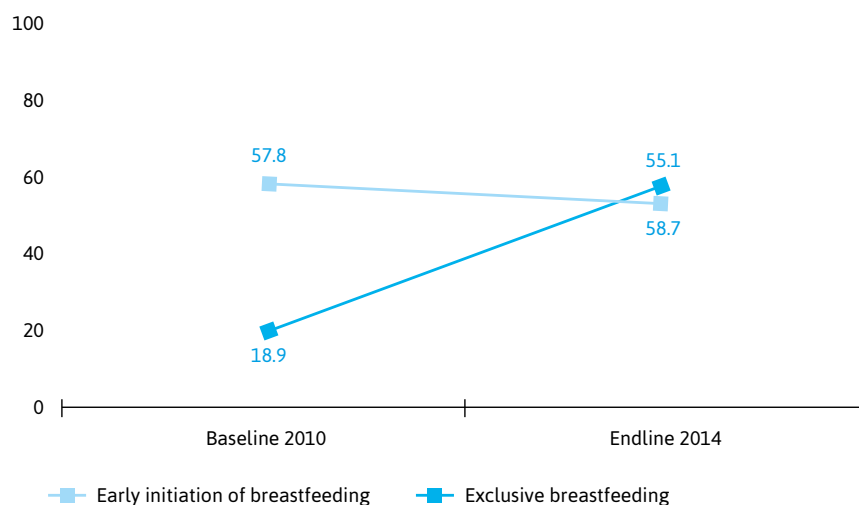


FIGURE 2
Framework for implementing infant and young child feeding at scale

In Vietnam, following the initial success, A&T began to improve on and scale-up its approach throughout the region. At that time, however, A&T realised that the improvements made in breastfeeding did not include EIBF. While exclusive breastfeeding to six months increased from 19% to 58% (Menon *et al.*, 2016), EIBF was declining (see Figure 3). Almost all births in Vietnam occurred in a health facility; however, it was common practice to separate the baby from the mother at birth before breastfeeding was initiated. A&T had worked with the government's Ministry of Health on measures to help mothers and caregivers understand and be successful in providing breastmilk exclusively for six months, but it had not addressed what was happening at birth to support breastfeeding.

FIGURE 3
Percentage change in
breastfeeding practices in
A&T intervention and non-
intervention areas



A&T and the Ministry of Health began to address this challenge in 2014. At about the same time, the World Health Organization (WHO) and Unicef also realised the need to confront low rates of EIBF. They finalised the Action Plan for Healthy Newborn Infants in the Western Pacific Region, which established a set of early essential newborn care (EENC) practices to occur at every birth, including immediate skin-to-skin contact and EIBF. The Ministry of Health and partners turned this regional action plan into specific EENC guidelines for Vietnam. Together they tackled early initiation of breastfeeding using the same effective approaches that had improved the rates of exclusive breastfeeding, with a focus on provider behaviours, institutional guidelines, and outreach to the community.

A&T directly supported about 800 health staff and 100 hospitals in seven provinces to begin implementation of the EENC guidelines. National trainers received training and local champions of breastfeeding were identified to train facility staff in the new guidelines. Coaching and supportive supervision mechanisms were put in place, and data were collected to track the outcomes. The result was that EIBF for vaginal deliveries reached 90% or higher in the A&T-supported facilities.

But data showed a significant difference between EIBF after vaginal deliveries and after Caesarian-section deliveries: only 30% of mothers were able to practice EIBF after a C-section. Monitoring data revealed that providers lacked the skills to follow EENC guidelines after a C-section, and did not have sufficient personnel to give these mothers the extra support they need. Sharing the data convinced the Ministry of Health to create national guidelines for EENC that were specific to C-section deliveries. In late 2016, using its network of national trainers, A&T supported training to implement these additional guidelines in five provinces, reaching about 65 hospitals and 600 health staff. These efforts closed the gap for EIBF between vaginal and C-section deliveries (see Figure 4).

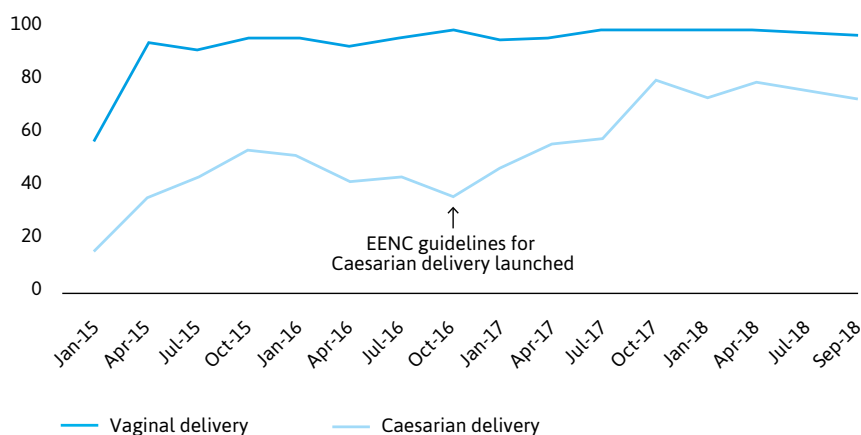


FIGURE 4
Percentage of newborns
breastfed within one hour of birth

Success factors in increasing EIBF

Several factors enabled the widespread improvement in provider behaviour that supported the increase in EIBF and other EENC practices in Vietnam. Other institutions were simultaneously working to improve the enabling environment, for instance the WHO- and Unicef-led regional First Embrace initiative, which increased the demand for EENC. National-level interpersonal communication and mass media activities were also promoting EENC and EIBF. Based on the success in the seven provinces, A&T, with the Ministry and other organisations, helped to expand EENC, including support for EIBF to all major maternity hospitals in Vietnam.

At the facility level, the keys to success were as follows:

- Having explicit national-level EENC policies and facility guidelines for both vaginal and C-section deliveries increased provider adherence to key EENC procedures at delivery.
- Securing support from a dedicated group of breastfeeding champions in both the government and the facilities helped to get the policies implemented nationally. These champions, along with active leadership across facilities, held practitioners accountable to the new policies.
- Providing on-site coaching and supportive supervision assured opportunities for regular feedback to continually strengthen health workers' capacity and adherence.

‘Starting breastfeeding within one hour of birth should be relatively easy to implement.’

- Ensuring regular monitoring data – a simple monitoring form that collected delivery and newborn care data from existing, required reports – allowed facility staff and the programme team to reward high-performing facilities, and redirect training and support resources to those institutions that were performing poorly. This information helped to facilitate timely decision making in target provinces, and it provided guidance for changes in policies and health provider-driven practices.

A&T continues to work with the Ministry of Health, Unicef, the WHO, and stakeholders in the region to improve breastfeeding. The experience and results from Vietnam have been disseminated to ten countries in the region through regional knowledge exchanges on breastfeeding-friendly health systems. Representatives from other countries in the region have had the opportunity to observe best practices in breastfeeding support in health facilities in Vietnam, and to create their own country-specific workplans. A&T has also supported Danang to establish a regional learning and research centre for newborn care and human milk access to facilitate and sustain technical leadership, supervision and knowledge exchange for breastfeeding promotion and support.

Mother and her newborn boy at Quang Nam General Hospital, TamKy City, Vietnam



Currently, a network of facilities is being established as Centres of Breastfeeding Excellence in Vietnam, Cambodia, Myanmar and Laos, to serve as models for promoting, protecting and supporting breastfeeding, and implementing EENC. These centres will be a hub of generating, sharing, and applying breastfeeding knowledge and policies in the region. Partners continue to work together to advocate for national laws and policies for better maternity protections and stronger regulations on the marketing of breast milk substitutes. Collectively, these efforts continue to contribute to the remarkable progress being made in policies and programmes that protect breastfeeding and give newborn babies the best start to life.

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Scaling nurturing care through a multi-sectoral, bottom-up approach in the Kyrgyz Republic

- It is challenging for government programmes to cover all aspects of nurturing care at scale.
- Aga Khan Foundation identified entry points in Kyrgyz Republic by understanding local culture.
- Interventions include a mobile app and kindergartens in yurts for nomadic families.

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The Nurturing Care Framework emphasises the importance of a multi-sectoral approach for young children's optimal development: early learning, health, nutrition, responsive care, and security and safety are all critical for children's development, yet often the focus is on only one of the components. Scaling those multiple pieces is even harder. In the Kyrgyz Republic, the Aga Khan Foundation (AKF) took the approach of scaling a multi-pronged and bottom-up approach to nurturing care.

The Aga Khan Foundation is part of the Aga Khan Development Network (AKDN) which works in over 30 countries around the world. AKDN's annual budget for non-profit development activities is approximately USD 950 million. Its economic development arm, the Aga Khan Fund for Economic Development (AKFED), generates annual revenues of USD 4.3 billion, but all surpluses are reinvested in further development activities in fragile, remote or post-conflict regions.

The Aga Khan Foundation has been in the Kyrgyz Republic since 2002. Its activities aim to improve the quality of life of the Kyrgyz people, and are guided by messages from His Highness the Aga Khan, the AKF's founder and chairman, who believes that:

development is sustainable only if the beneficiaries become, in a gradual manner, the masters of the process. This means that initiatives cannot be contemplated exclusively in terms of economics, but rather as an integrated program that encompasses social and cultural dimensions as well. Education and skills training, health and public services ... are among the various aspects that must be taken into account.

(AKDN, online)

This requires a multi-sectoral and bottom-up approach from the beginning. It calls for active inclusion of communities and local government in shaping a high quality of life for themselves. These critical values underpin AKF's contribution in the Kyrgyz Republic, and as a result, the local health and education departments are leading and scaling their own early childhood services. These local government leaders are now influencing national policy to achieve national scale.

Starting a multi-pronged nurturing care strategy in the Kyrgyz Republic meant working with communities to understand their culture, and finding where parents and young children were located. By identifying where people spent their days – in community health centres, at home or in the pastures with their families, in community centres, in schools, etc. – AKF gained a better understanding of the natural entry points by which it could engage with and mobilise communities, and thereby initiate and influence local government around multi-sectoral early childhood development. There are currently four programmatic entry points in this strategy that reach families and children, especially the most marginalised.

Intervention area 1: Community health workers

Community health workers, who are called Primary Medical health staff, are the backbone of the health system in rural communities in the Kyrgyz Republic, and the critical platform for reaching children in the first 1000 days of life. Working in partnership with the Johnson & Johnson Corporate Citizenship Trust and the Ministry of Health, the AKF mobilised them to support nurturing care for pregnant women, newborns, toddlers and families in three ways.

First, to improve antenatal and postnatal care, the AKF started 24 birth preparedness schools (called Parent Schools) in remote areas of Naryn and Osh



Photo: Courtesy of Jean-Luc Ray/Aga Khan Development Network

oblasts. Parent Schools build awareness among new and expecting mothers on the importance of breastfeeding, nutrition, prevention of anaemia, danger signs during pregnancy, and the importance of fathers' involvement and children's development. AKF integrated an adapted version of the Care for Child Development package into these Parent Schools.

Second, the Ministry of Health mandates 17 home visits by community health workers in the first year of life, once each quarter between 1 and 2 years old, and twice a year between 2 and 3 years old. The community health workers use an adapted version of the Care for Child Development package during home visits.

Third, each child born in the Kyrgyz Republic receives a health card, which includes his or her immunisation record and measurements of height, weight, head circumference, etc. AKF is now working with the health department to integrate critical messages from the Care for Child Development package about responsive care, stimulation, health and nutrition into these health cards.

'Working in partnership, the Aga Khan Foundation mobilised the Ministry of Health and the private sector to support nurturing care.'

Intervention area 2: Community-based early learning through yurt kindergartens

Many rural communities in Kyrgyz Republic are nomadic and spend about three months per year moving their livestock to high pastures or *jailoo*. During this time, young children are not able to access learning activities. To address this challenge for nomadic children and families, AKF created a mobile early learning approach called 'Jailoo Kindergarten' that uses yurts. Yurts are houses made from wooden sticks covered with felt, which nomadic communities move from pasture to pasture. They are easy to pack up and carry as communities travel from one location to the next. Usually families sleep in yurts and keep all necessary life utilities inside.

The Jailoo Kindergartens are now part of a system of linked central and satellite kindergartens. The yurt kindergartens have been exceptionally popular. Early surveys indicated that when children who attended them entered primary school, they outperformed others in both reading and maths. Providing early learning activities in mobile locations where families live during these months has significantly increased access to early learning. The model has been replicated and is currently being scaled nationally by the international foundation, Roza Otunbayeva's Initiative (whose founder and leader is former President of the Kyrgyz Republic, Roza Otunbayeva), and communities themselves.

Intervention area 3: Parental Resource Centres in community spaces

Parental Resource Centres, established in community and school libraries in villages, towns and cities, are places where families go to meet each other, obtain and share information and skills, and use resources like children's books, brochures or leaflets on health and child development, toys that can help stimulate their children's development, and so forth.

Many communities have libraries, but for years there was a dearth of children's books in the Kyrgyz language. AKF not only collected local stories and produced books in Kyrgyz, but used this opportunity to go where parents went to promote responsive caregiving, stronger parent–child interactions and literacy. Moreover, AKF runs the Reading for Children programme, which helps parents understand more active ways to use books to interact with and read to children. It helps them deepen conversations and discussions about pictures and stories in books.

Intervention area 4: Use of technology to scale early childhood development messages

The Aga Khan Foundation worked with the company Colibri Studio to integrate critical messages from the Care for Child Development and Science of Early Child Development training packages into a mobile application called BalAppan. It is free and can be downloaded from Google Play. This mobile application contains three parts:

- 1 Recommendations for parents on child development through play and communication from birth to 2 years and above. After reading the recommendations, parents are requested to pass a test on each age group (birth to 1 week, 1 week to 6 months, 6–9 months, 9–12 months, 12–24 months, and over 24 months).
- 2 12 short videos on topics including environmental safety, child development during household work, the role of play, the importance of handmade toys, communication with the baby, the role of parents, communication from birth, the father's role, sibling support, the importance of reading, the grandparents' role.
- 3 Instruction for making one's own toys: an animated representation of the process of making toys from available materials at home.

'In the Kyrgyz Republic, we took the approach of scaling a multi-pronged and bottom-up approach to nurturing care.'

Conclusion

Scaling early childhood interventions is often thought of from the perspective of a national-level policy or programme that trickles down to local levels. The Aga Khan Foundation took a different, bottom-up approach – starting with a few local areas, listening to communities and local government, and considering where families and young children normally went. Co-designing interventions with local government ultimately achieved their buy-in and political commitment, though this took time. Involving communities early and throughout the process means they now own the interventions and have become advocates for embedding nurturing care into national government policies that are leading to scale.

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Lessons learned from national government-led efforts to reduce adolescent pregnancy in Chile, England and Ethiopia

- ▷ Adolescent pregnancy and childbearing can have negative health, social and economic consequences.
- ▷ Low birthweight, pre-term birth and severe neonatal conditions are among the risks to newborns.
- ▷ Chile, England and Ethiopia show that adolescent pregnancy prevention programmes can succeed at scale.

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Adolescent pregnancy is a global public health challenge. Most births to adolescents – 95% – occur in developing countries, where an estimated 21 million girls aged 15–19 became pregnant in 2016, of whom 12 million gave birth (Darroch et al., 2016). In those countries, an estimated 2.5 million girls under 16 give birth every year (Neal et al., 2012).

Marina Plesons

World Health Organization

The current rate of 44 births per 1000 women aged 15–19 is down from 65 in 1990–1995, although progress has been uneven (United Nations Department of Economic and Social Affairs, 2015, 2017, 2018). Impoverished, poorly educated, rural girls everywhere are more likely to become pregnant than wealthier, urban, educated ones (United Nations Population Fund (UNFPA), 2013).

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For some adolescent girls, pregnancy and childbirth are planned and wanted, within or outside marriage. For many, they are not and result from unplanned, sporadic or coerced sex. Many sexually active girls are unaware of contraception, do not want to use it, or do not have the agency to obtain it. When they try to get and use contraception, they may face restrictive laws or disapproving health workers and/or partner resistance (Chandra-Mouli et al., 2017).

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Lemessa Oljira

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Pregnancy and childbirth complications are the leading cause of death among girls aged 15–19. Additionally, some 3.9 million unsafe abortions occur annually, with serious consequences (Darroch et al., 2016). Early childbearing also increases risks for newborns, including low birthweight, pre-term birth and severe neonatal conditions (Ganchimeg et al., 2014). Unmarried pregnant adolescents may face stigma or rejection and adolescent mothers are more likely than older mothers to experience intimate partner violence (Chandra-Mouli et al., 2017). Studies suggest that young adolescent mothers who experience perinatal depression or are in difficult social situations may experience difficulties in securely attaching with, caring for and nurturing their babies and children (Figueiredo et al., 2006; Huang et al., 2014). Finally, early pregnancy often leads to school dropout, reduces employment opportunities, and perpetuates cycles of poverty (Loaiza and Liang, 2013).

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In 2011, the World Health Organization and UNFPA published guidelines on preventing adolescent pregnancy and poor reproductive outcomes in developing countries, with six recommendations:

- reducing marriage before age 18
- creating understanding and support
- increasing use of contraception
- reducing coerced sex
- reducing unsafe abortion
- increasing use of skilled antenatal, childbirth and postnatal care.

(WHO, 2011)

These recommendations have been endorsed by more recent reviews (Hindin et al., 2016).

Adolescent pregnancy prevention is high on the global agenda. Many governments are addressing it, although reports on achievements are only beginning to emerge. Here are three examples, from Chile, England and Ethiopia.

2016 Annual meeting of the Youth Advisory Council on Health



Photo: Courtesy of National Programme of Youth, Ministry of Health, Chile

Chile

- ▷ 51% reduction in the proportion of births to mothers aged under 19 (2000–2017) (Paez, 2018)

How adolescent pregnancy was put on the national agenda

Recognising its high adolescent fertility rate (55.8 births per 1000 women aged 15–19 years in 2005), Chile adopted the regional 2007–2013 Andean Plan for the Prevention of Adolescent Pregnancy (Dides and Fernández, 2016; World Bank, 2019). Chile's government targeted a 10% reduction in the adolescent fertility rate in the 2011–2020 National Health Strategy and strengthened the National Comprehensive Health Programme for Adolescents/Youth and the corresponding Strategic Action Plan (Gobierno de Chile, 2013).

How scale-up was planned

A five-pronged approach¹ to improve the health system's responsiveness to adolescents was developed for the ten-year strategy. New government circulars were issued on parental consent requirements, adolescents' autonomy, and protecting young people from sexual abuse. Further, several laws were consolidated into one framework which defined and mandated different stakeholders' roles and responsibilities (Gobierno de Chile, 2013, 2018).

How scale-up was managed

The programme built on functional systems by strengthening the capacity of frontline workers, and implemented its strategy gradually, starting with regions with the highest need (World Bank, 2019). To respond to the need for better data, a monthly statistical register was created to gather data on adolescents, disaggregated by age, sex, and risk factors.

How support was built, and resistance addressed

The programme drew legitimacy from regional/national plans and legislative frameworks. The Ministry of Health's media department made data on progress available to journalists to publicise the positive results. Intensive advocacy with scientific associations, NGOs, women's advocates and young people helped to overcome resistance to contraceptive provision. However, the programme strategically decided not to provide education on sexuality to avoid risk of opposition to the broader agenda.

How sustainability was ensured

Grounding the approach in the ten-year National Health Strategy ensured sustained human and financial resources through three governments of left- and right-leaning political parties. Positive results encouraged other stakeholders to collaborate.

'The programme built on functional systems by strengthening the capacity of frontline workers, and implemented its strategy gradually.'

1 Training health workers; creating adolescent-friendly spaces in primary health centres; promoting a range of contraceptive methods; improving outreach and referrals; and supporting school retention and re-entry for pregnant adolescents and adolescent mothers.

England

- ▷ 55% reduction in the under-18 conception rate (1998–2015)
(Hadley *et al.*, 2016)

How adolescent pregnancy was put on the national agenda (Hadley *et al.*, 2016, 2017)

In the late 1990s the incoming government positioned teenage pregnancy as a cause and consequence of social exclusion which required collective action. Previous governments' efforts had relied on the health sector, with little results. Strong advocacy from NGOs and medical organisations kept lack of progress high on the political agenda. The ten-year goal of halving the under-18 pregnancy rate, commitment to sustained resources, and launch by the Prime Minister secured the strategy as a national priority.

How scale-up was planned

Scale-up was integral from the start. A national programme, framed around four themes², was delivered by multiple agencies working together in all 150 local government areas with agreed local targets. Fundamental to the scale-up effort was the establishment of a structure which consisted of a national unit, nine regional teenage pregnancy coordinators and 150 local coordinators, and multi-agency partnership boards. A local implementation grant contributed to partnership building and joint implementation.

'The evidence-based strategy was strongly endorsed by NGOs and professional organisations.'

How scale-up was managed

Accurate and up-to-date conception data enabled a regular review of progress. A mid-strategy review comparing areas with contrasting progress found that regions that were applying all the recommended actions had demonstrated reduced rates, validating the strategy's multi-component approach. More prescriptive guidance, direct engagement of government ministers and senior leaders in poor-performing areas, and tailored support helped to accelerate progress.

How support was built, and resistance addressed

The evidence-based strategy was strongly endorsed by NGOs and professional organisations. Trust was enhanced by the appointment of experts to an Independent Advisory Group, charged with holding the government to account. Its expertise was influential with local senior leaders and helped the government respond to negative media reporting by a small but vocal minority on the 'dangers' of sexuality education and providing confidential contraception to under-16s.

How sustainability was addressed

Sustaining progress beyond the end of the strategy and through a change of government posed challenges. However, the strategy had established awareness that adolescent pregnancy needed to be addressed and that the right actions had impact. Ministers called for further progress. Local leaders called for continued support and for updated national guidance. The adolescent pregnancy rate indicator was included in the public health dataset for monitoring national and local progress. Legislation for compulsory relationship and sexuality education in all schools (ages 5–16) from 2020 should embed prevention components of the strategy for future generations.

² Joined-up action; better prevention through improved relationships and sex education and access to effective contraception; a communications campaign to reach young people and parents; and coordinated support for teenage parents to improve outcomes for them and their children.

Ethiopia

- ▷ 29% increase in contraceptive use by married adolescent girls aged 15–19 (2000–2016), and 38% increase in postpartum contraceptive use among the same age group of married adolescent girls (2005–2016) (Central Statistical Agency (CSA) Ethiopia and ICF; Worku *et al.*, 2015)

How teenage pregnancy was put on the national agenda

Within the context of the Millennium Development Goals, the Ethiopian government targeted maternal and childhood mortality reduction in rural areas, where over 80% of the population reside (Assefa *et al.*, 2017).

How scale-up was planned

The Ministry of Health launched an ambitious Health Extension Programme (HEP) to deliver health education and basic health services in the community, and to strengthen linkages to health facilities. It aimed to empower rural households to 'take responsibility for producing and maintaining their health' (Assefa *et al.*, 2009).

How scale-up was managed

Over five years, nearly 35,000 individuals (women in all regions except pastoral ones) selected by communities were recruited and trained as a new cadre of salaried health extension workers. In addition, mid-level health workers were recruited and trained to provide midwifery, neonatal and emergency care services in newly constructed or rehabilitated health centres. A core team, including technical experts and chaired by the State Minister of Health, reviewed progress, set priorities and developed plans. Problems that arose were identified and addressed (Assefa *et al.*, 2009).

How support was built, and resistance addressed

The Ministry built support at national level through partnerships with professional associations of public health professionals and clinicians. At the local level, it engaged workers from the communities they would serve in, who were aware of the context and were trained and supported to engage in dialogue to challenge norms such as low utilisation of contraception or maternal health services (Assefa *et al.*, 2009).

How sustainability was addressed

The government formulated laws guaranteeing free maternal and newborn health services in public health facilities and liberalising the law on providing abortion care in specified circumstances. Management and financing of the HEP, such as salaries for health extension workers and rehabilitation of health posts, were decentralised to regional and district levels, creating local ownership (Assefa *et al.*, 2009).

Discussion and conclusion

Well-connected groups of change agents used available opportunities (a regional initiative in Chile, a new government in England) to create momentum for scaling-up adolescent pregnancy prevention.

'The Ministry built support at national level through partnerships with professional associations of public health professionals and clinicians.'

All three countries planned scale-up systematically and pragmatically. They developed evidence-based strategies grounded in supportive national policies. They designated government departments to house and champion the efforts. They simplified the package of interventions to only the essential elements. They communicated clearly what needed to be done, where, how and by whom.

All three countries committed adequate resources and managed implementation effectively. This required effort to engage and sustain the engagement of relevant government departments at different levels, NGOs and professional associations, and to ensure that an acceptable standard of quality was maintained. They used the findings of assessments and reviews to reshape their programmes.

England and Chile anticipated resistance to providing contraception to unmarried adolescents and worked strategically to address it. Ethiopia focused on young married women whose needs were widely acknowledged.

All three countries used data creatively to communicate the progress being made. They advocated for the efforts to be sustained and worked hard to sustain activities by integrating elements of the scale-up effort into wider national policies, strategies and indicator frameworks.

Adolescent pregnancy has clearly known causes, and serious health, social and economic consequences. There is consensus on the actions needed to prevent it. This knowledge has fed into national policies and strategies but has not yet resulted in documented examples of successful government-led national programmes. These case studies fill this gap. They show what can be achieved with the application of good science, with strong leadership and management, and with perseverance. They challenge us all to do what is doable and urgently needs to be done – now.



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Loving fathers, thriving children: opportunities for scaling gender-transformative approaches

- ▷ *Becoming a father for the first time often makes men open to new behaviours and ideas.*
- ▷ *Programmes to engage fathers can improve child outcomes and reduce domestic violence.*
- ▷ *The REAL Fathers Initiative and Program P have proven their effectiveness at scale.*

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Parents expecting their first child are in a period of transition – excited and apprehensive. It can be a ‘teachable moment’. For men, it can be a critical turning point, a time when they are especially open to learning new behaviours and ideas about what it means to be a father and, more broadly, what it means to be a man. But most parenting programmes engage only mothers, reinforcing social norms that ascribe the care of children to women.

Evidence from two programmes – the Responsible, Engaged and Loving (REAL) Fathers Initiative in Uganda and Program P in Rwanda and elsewhere – demonstrates the enormous difference it makes when fathers are engaged in caregiving. Experience suggests these interventions can be successfully replicated or sustainably scaled through integration into early childhood and other development programmes.

Program P and REAL Fathers both take a gender-transformative approach, recognising that beliefs related to gender can profoundly influence family life. Dominant notions of masculinity, for example, may lead men to assert control over women and discipline their children harshly (Heilman and Barker, 2018). REAL Fathers and Program P challenge these notions, explicitly aiming to dismantle inequitable power dynamics. They build on positive cultural norms that encourage loving families and relationships and reposition the role of men as caring fathers and supportive and equal partners.

Fathers’ positive involvement in caregiving is associated with children’s emotional and social well-being and cognitive development (Lamb, 2004; Cabrera and Tamis-LeMonda, 2013). Evidence suggests a gender-transformative approach is more effective for violence prevention than interventions that do not address gender norms and behaviours (Fulu et al., 2014). However, very few such programmes have been implemented at sufficient scale to have meaningful impact.

The Responsible, Engaged and Loving (REAL) Fathers Initiative

REAL is a father-centred mentoring initiative first piloted in Northern Uganda, where high levels of intimate partner violence (IPV) and violence against

children (VAC) stem in part from decades of conflict. REAL works with first-time fathers with toddler-age children. Respected men in the community are selected by fathers and their partners and trained to mentor young fathers using a curriculum that promotes positive child discipline, caregiving, gender equity and communication.

Once a month for six months, young fathers participate in home and group mentoring sessions. A monthly poster campaign reinforces the themes discussed. The intervention ends with a community celebration to support fathers' achievements and express their commitment to sustaining new behaviours. In 2013, REAL was implemented by Save the Children and evaluated by the Institute for Reproductive Health. Results from a quasi-experimental trial showed it significantly improved positive parenting and partner communication and reduced IPV and VAC (Ashburn *et al.*, 2017), with most results sustained one-year post intervention.

In 2015, REAL was expanded through integration into a livelihoods programme in Northern Uganda and early childhood development centres in Karamoja, Uganda's least-developed region. Results confirm effectiveness in improving young fathers' skills in parenting, couple communication and preventing IPV and VAC (Kohli *et al.*, 2019). Designed for scale, this simple, culturally grounded mentorship model can be integrated into existing programmes while retaining its effectiveness. Planning for scale-up through integration is underway in several contexts globally.

'A gender-transformative approach recognises that beliefs related to gender can profoundly influence family life.'

Promundo's Program P

Program P engages men when they are open to adopting new caregiving behaviours – from their partners' pregnancies through their children's early years.¹ Originally developed in Latin America by REDMAS, Promundo, and CulturaSalud, it has been adapted in at least ten countries, from Brazil to Sri Lanka, Portugal and South Africa, in both rural and urban settings (Promundo *et al.*, 2013).

Through participatory reflection exercises and discussions, role playing, and hands-on activities, men and their partners are encouraged to discuss and challenge traditional gender norms and practise equitable, non-violent behaviours. Program P is one of the key programmatic tools of the MenCare Global Fatherhood campaign (MenCare, online), a platform co-coordinated by Promundo, to reframe the global debate about fatherhood with partners in more than 45 countries.

In Rwanda, the Bandebereho ('role model') intervention used a curriculum adapted from Program P to engage men in maternal and child health, in collaboration with the Rwanda Men's Resource Center (Rwamrec) and the Ministry of Health. Young and expectant fathers were invited to 15 sessions (maximum 45 hours) and their partners joined for 8 sessions (maximum 24 hours). Topics addressed included gender and power, fatherhood, couple communication and decision-making, IPV, caregiving, child development, and male engagement in reproductive and maternal health.

1. Program P technically includes information and tools for health providers and guidance on community campaigns, but here we describe efforts around the group education component.



Photo: Courtesy of Ojamuge Dickens/Save the Children

Results from a randomised controlled trial show that almost two years after the programme, men who participated were nearly half as likely as those in the control group to use violence against their female partners and spent almost one hour more per day doing household chores, and both men and women were less likely to use physical punishment against their children (Doyle *et al.*, 2018).

Additional unpublished analysis showed that women and men in the intervention were less likely to support corporal punishment, and more likely to use positive discipline techniques, such as explaining why the child's behaviour was wrong. Compared to the control group, both men and women in the intervention group spent more time teaching their children something, and men spent more time telling stories, singing, or playing with children.

Program P has been recently adapted, with the NGO Abaad, for Lebanese and Syrian fathers and couples in Beirut, with a specific focus on early childhood development.

‘Proven interventions need to be adapted to maintain their effectiveness in new settings and must be faithful to their core values, essential elements and change mechanisms.’

Lessons from scaling up

Successful scale-up involves deliberate efforts to increase the impact of effective innovations to benefit more people and foster lasting policy and programme support (World Health Organization and ExpandNet, 2009). It involves expanding a well-defined, proven practice through a systems approach that fully engages stakeholders in adaptation and integration (Fixsen *et al.*, 2005).

Adaptation is an integral part of successful scale-up: using monitoring, learning and evaluation data as it becomes available to test assumptions, revise the theory of change, refine implementation and adapt the intervention for new contexts. After the pilots proved the effectiveness of the programmes, REAL and Program P were scaled through integration into existing platforms.

Anchoring core values

Program P and REAL approached scaling up with the understanding that proven interventions need to be adapted to maintain their effectiveness in new settings and must be faithful to their core values, essential elements and change mechanisms. To achieve this, the REAL team engaged key stakeholders involved in the pilot to review learnings and identify core values (for example, positive messaging, gender transformation), essential elements (such as home visits, group meetings) and change mechanisms (such as community mentorship, public testimony in community celebration) to retain in moving to a new setting or integrating the approach into new programmes.

In replicating and scaling-up Program P, Promundo and partners also aim to focus on the core elements and hypothesised mechanisms for change. Because Program P's theory of change focuses on critical reflection and skills building, it is adaptable to many contexts and programme platforms, and can target specific outcomes or

topics. For example, while the original Program P focused on maternal and child health, in Lebanon the focus is on early childhood development, and in Armenia (MenCare, 2015), on preventing prenatal sex selection. This provides flexibility to align with various institutions and address multiple priorities.

Maintaining the focus on transforming social norms

Addressing social norms is at the heart of gender-transformative programming. Both REAL and Program P encourage fathers and couples to embrace behaviours that may depart from the gender roles they were taught. They engage partners, family members and the community in affirming new values, skills and attitudes.

It can be challenging to maintain a gender-transformative focus at scale. A clear articulation of the norms at play, often identified by formative research, and ongoing reflection with programme staff and beneficiaries, can keep the programme on track. The team adapting REAL for DR Congo is using a social norms exploration tool to carefully identify norms related to REAL's desired outcomes, and the role of elders, family members and religious leaders in sustaining existing norms and supporting the adoption of new behaviours and norms. This will be used to adapt the approach if needed.

Explicit discussion of gendered social norms is central to the Program P curriculum worldwide. Reflecting on the costs of rigid norms, and learning and practising new skills in caregiving, couple communication and joint decision-making in a safe, peer environment, can lead to a range of positive behaviours (Doyle et al., 2018). More broadly, challenging social norms is at the core of the MenCare campaign, which seeks to change policies, practice and public opinion at national and global levels, emphasising the benefits of gender equality for everyone – women, children, and men themselves – and 'normalising' men's roles as equal caregivers.

'Addressing social norms is at the heart of gender-transformative programming, and can be challenging to maintain its focus when going to scale.'

The critical role of key stakeholders

Scale-up requires working with partners who have reach and longevity, a commitment to serving a particular population or region over time, who will fully own the programme. For both programmes, partners have included non-governmental and governmental organisations.

Implementing partners and community and government stakeholders were engaged in all aspects of the REAL adaptation and scale process. Scale-up in Karamoja was led by a multi-sectoral adaptation team and included integration in local NGOs' early childhood programmes with support from Save the Children Uganda. District-level government staff trained the mentors and supervised implementation.

Organisations around the world have taken ownership of MenCare campaign materials and the Program P curriculum, adapted to their context and needs. In Rwanda, Promundo and Rwamrec collaborated with the Ministry of Health and

district authorities to design and implement the programme. This generated support and ensured that the content was aligned to national priorities. The partners are now planning to institutionalise the programme through the existing system of community health workers.

Conclusion

The experiences of Program P and REAL suggest that these relatively simple models are impactful and can be successfully incorporated into existing platforms – including early childhood development programmes. Planning for scale from the programme design and pilot stages, and clarifying core programme values, essential elements and mechanisms of change, allowed these models to sustainably increase their reach and impact. They illustrate a pathway towards healthier, happier and gender-equitable families.

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Inter-sectoral coordination in early childhood systems: the Primokiz approach

- ▷ Coordination among sectors is essential to provide stable childhood services.
- ▷ Primokiz supports local governments to develop comprehensive early childhood strategies.
- ▷ The Jacobs Foundation started Primokiz in Switzerland, and is now partnering with ISSA in Romania.

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Early childhood services are provided by a wide range of programmes, which primarily are administered by the education, health and social welfare sectors. Although the overarching aim of all these services is to provide the best possible start to children and their families, each one of them follows and adopts different principles, values, frameworks, professional cultures and practices. This often results in instability or discontinuity of provision, and uneven quality of services.

Drawing on the above, recent policy and research initiatives call for a re-examination of our vision for children and childhood and for planning and initiating coherent efforts in order to provide both children and their families with a wide range of high-quality services that ensure the best possible start in life and conditions of nurturing care. There is a need to offer services that are aligned and coordinated, since good health, nutrition, security and safety, responsive caregiving, and opportunities for early education are all equally important in a child's development (World Health Organization *et al.*, 2018).

These calls are informed by research results which suggest that provision of coordinated and aligned services yields positive effects for children (such as improved behaviour, social skills and learning); for parents and families (for example, more time to look for jobs, increased employment choices, improved family finances); and for people who work with young children (improved practice and professional development) (Ionescu *et al.*, 2017).

In addition, the call for coordinated services builds on the foundation of progressive universalism, which is considered an effective approach for tackling inequalities from early on and for enhancing equity and equality of opportunity. This approach ensures that the same services are available to all, a continuum of nurturing care is established, and intensive services are provided to families and children with additional needs. It also fosters the provision of services that span the continuum from social interventions to child protection.

One of the founding principles of the International Step by Step Association (ISSA) is that 'it takes a village to raise a child'. In that sense, ISSA's work has focused on the need for horizontal and vertical coordination of services in order to ensure that the needs and rights of children and families are met, and that each child is given ample opportunities for optimum development

and well-being. Complementing other initiatives, ISSA has embraced the proven contribution the Primokiz approach can make in achieving a local comprehensive and aligned strategy for early childhood.

Learning from different country contexts

Coordination of services is a long process and a lasting journey. ISSA has committed to travelling the path of coordinating early childhood provision and has started contributing to learning about and informing this journey through various mechanisms. The principles that underpin the overall approach and philosophy of working in an integrated manner are central to every effort for greater coordination among sectors, in order to foster children's optimal development through the provision of high-quality services.

Such principles have been underlined in the INTESYS Project¹, where ISSA played an important role in developing a toolkit for enabling actors at different levels in the early childhood system to establish a dialogue horizontally and vertically, and to co-construct their joint pathways for cooperation and coordination. Results of the INTESYS project highlight that there is no single road towards integration. Any intervention aiming at integration may be bottom-up (front-line delivery, community, parents) and/or top-down (interagency governance, policies and strategies) but needs to be aligned and underpinned by three building blocks:

- 1 a shared vision and a shared understanding among the stakeholders
- 2 key factors supporting integration, and
- 3 quality practices.

1 INTESYS was a project funded by the European Commission under the Erasmus+ Programme, Key Action 3 – Forward Looking Cooperation Projects. The project started in November 2015 and ended in April 2019, and was implemented in four countries: Belgium, Italy, Portugal and Slovenia.



Results suggest that, in order to be effective, the journey towards integration should be based on a continuous participatory process of planning, acting and reflecting which ensures that the needs of children and families are taken into account as well as the capacities and possibilities of all actors involved.

Given its role in developing capacity to nurture learning across borders about improving early years services, ISSA's commitment to cross-sectoral coordination of early childhood systems was recently acknowledged by the Jacobs Foundation, which awarded ISSA the Primokiz licence, with the plan to make the approach available to other countries.

The Primokiz approach

In 2012, the Primokiz programme was launched by the Jacobs Foundation, with the aim of supporting municipalities, cities and cantons in developing comprehensive early childhood strategies. When the programme started, 18 small and medium-sized Swiss cities and three cantons participated. Early childhood experts worked with these cities and cantons to conduct a situation analysis and, based on the results, formulated a comprehensive strategy that aimed to link projected or existing early childhood education and care programmes in a way that would achieve the greatest possible impact and that would correspond with the various needs of children and their families living in the respective municipality or canton.

Two things are unique about this approach: it connects administrative entities with the political sphere and private actors in the field of early childhood (horizontal and vertical cooperation); and it conveys the message that early childhood is a cross-cutting issue for which the education, social services and health sectors are jointly responsible.

In response to the success of Primokiz and the high demand for the programme, the Jacobs Foundation decided in 2016 to introduce an expanded version called Primokiz², for which it partnered with the Roger Federer Foundation and the RADIX Swiss Health Foundation as the implementing partner. Primokiz² is being implemented in around 30 sites in Switzerland so far, and aims to have up to 50 additional sites participating in the programme. The sites are assisted in developing comprehensive early childhood strategies to put in place appropriate structural conditions and programmes according to the needs of the children and their families.

'This approach connects administrative entities with the political sphere and the private actors, and conveys the message that early childhood is a cross-cutting issue.'

Scaling-up the Primokiz approach

In 2015, the Primokiz approach was successfully introduced in Switzerland's neighbouring country, Germany, as part of the nationwide programme 'Qualität vor Ort' (Quality at the Local Level), Germany being similar to Switzerland in its political and societal structures. Supported by the German Federal Ministry for Family Affairs, Senior Citizens, Women and Youth as well as the

Jacobs Foundation, the programme is implemented by the Deutsche Kinder- und Jugendstiftung (German Children and Youth Foundation). Besides boosting quality in early childhood settings and organising 'Dialogues on Early Childhood Education', the programme offers support to 20 German municipalities to develop comprehensive early childhood strategies based on the Primokiz approach.

A year after concluding the first phase of the Primokiz programme in Switzerland, an evaluation showed that in almost all participating sites positive decisions were obtained from the political decision makers, welcoming the strategy and agreeing to suggested measures and funds for implementation. Furthermore, it was reported that networking and coordination between the education, health and social services sectors were established, as well as among the actors in the field. Through the participatory process, there developed among all the actors involved a general awareness and a deeper understanding of the importance and the comprehensiveness of early childhood.

Unanimously, the continuous support and involvement of political decision makers was found to be crucial for successful strategy development. Similar positive effects have been seen in the German municipalities which are still in the process of finalising their strategies.

'The continuous support and involvement of political decision makers was crucial for successful strategy development.'

Romania Grows with You

Drawing on long-standing experience in the early childhood field, the recent results from the INTESYS project and the additional well-established knowledge brought by the Primokiz approach, ISSA continues to raise awareness on the importance of developing a coordinated policy and service delivery for early childhood. Currently, ISSA partners with the Jacobs Foundation, the Step by Step Center for Education and Professional Development and UNICEF to implement a four-year initiative in Romania for piloting new ways of designing, planning and delivering early childhood services for the youngest children and their families through enhanced cooperation and coordination at community or municipality level.

This initiative, called 'Romania Grows with You', aims to create a paradigm shift, pushing forward the agenda in early childhood policies and practices in the country, while making the case for the importance of high-quality early years services. Among other models and methodologies, the Primokiz approach will be used in order to foster the development of a strong and comprehensive network of administrative, professional and private actors who will work together to analyse the current situation, develop a vision of future early years services provision, and build links between health, social care and education and across all relevant institutions and interest groups, vertically and horizontally.

Primokiz will be used in two pilot counties in Romania and in one district in Bucharest. The two counties selected to be part of Romania Grows with You expressed great interest in the project and a growing concern for high-quality

early childhood services to better cater to local needs. The project will build on previous local efforts, experience and knowledge of strengthening early childhood services, as well as the expertise of UNICEF and the Step by Step Center for Education and Professional Development, in supporting quality early childhood services for the youngest children.

The lessons learned and the key insights from both counties will support the aim to scale-up a comprehensive approach to early childhood services at national level. At its inception, the project will be implemented in close to 60 services for children from birth to 6 years of age. The project aspires to reach, during its four years of implementation, up to 100 early years services, both traditional (such as kindergartens and creches) and complementary services. Future plans in the partnership between the Jacobs Foundation and ISSA include continuing the partnership in Romania and exploring the implementation of the Primokiz approach in two more countries.

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Key principles for financing a qualified early childhood workforce

- ▶ Low- and middle-income countries struggle to recruit, train and retain early childhood workers.
- ▶ Well-trained, well-paid and supported workers are critical to ensuring the quality of early childhood services.
- ▶ Research points to three principles to improve the sufficiency and effectiveness of financing for workforce development.

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Financing the early childhood workforce – frontline health, education and social welfare workers and those who train and supervise them – is a critical but neglected policy issue. Based on a recent review of country experiences, in this article we propose three principles: making a stronger investment case to policymakers; developing budgets that reflect actual workforce needs; and advocating for legislation that institutionalises workforce development programmes.

The issue is critical because early childhood provision is expanding rapidly in low- and middle-income countries: for example, global pre-primary rates increased from 32% to 47% between 2000 and 2015 (UNESCO, 2018). Yet service quality is not always improving. Workforce calibre is not the only determinant of quality, but it is key (International Labour Organization (ILO), 2012; UNESCO, 2015). Recent research reviews consistently find that well-trained educators improve the quality of early childhood care and education programmes in developing countries (Engle *et al.*, 2011; Behrman *et al.*, 2013; Rao *et al.*, 2014). From Bangladesh to China to Costa Rica, there is evidence of a positive relationship between better-educated and trained personnel and both programme quality and children's outcomes (Rao *et al.*, 2014; Neuman *et al.*, 2015).

Three challenges to scaling-up a quality workforce

Building and supporting a cadre of competent early childhood personnel is difficult, for three main reasons.

- The sheer pace at which early childhood programmes are expanding creates a greater need to identify, train, supervise, and monitor new staff – a labour-intensive process – while also putting more strain on already-stretched existing personnel.
- There is undersupply of potential workers (UNESCO, 2016; *The Lancet*, 2018). As a result, in many countries, paraprofessionals and volunteers comprise a significant portion of the workforce (Araujo *et al.*, 2013). While these are important, more full-time, trained professionals are needed to improve and sustain child development and learning opportunities.
- Qualified personnel tend to cluster in urban areas; it is challenging to attract them to work in rural areas – but necessary in order to close geographic equity gaps and deliver services at national scale (Mitter and Putcha, 2018).

These three challenges help explain why the workforce in many countries cannot meet access and quality objectives. For example, UNESCO has found that fewer than half of pre-primary teachers were trained to national standards in one-quarter of the 80 low- and middle-income countries with available data (Neuman *et al.*, 2015). This message was reinforced during a comprehensive set of key informant interviews with policymakers and practitioners in 15 countries, conducted as part of the Early Childhood Workforce Initiative (2019). For example, policymakers pointed to an array of recruitment and retention issues, and limited efforts to address them (Early Childhood Workforce Initiative, 2019).

The relationship between financing and the workforce

Additional money is not a panacea, but lack of investment undergirds all these multifaceted challenges. The early childhood workforce in low- and middle-income countries is characterised by low pay, low status and poor working conditions (ILO, 2012; Pearson *et al.*, 2017). Low pay, relative to other sectors, makes it harder to attract and retain qualified personnel: fewer qualified candidates apply and turnover rates tend to be higher, undermining the stable relationships children need for their healthy development (OECD, 2012).

Greater financing can improve access to pre-service training and ongoing professional development opportunities, which are urgently needed to ensure quality and consistency of services. It can also provide incentives for individuals to work in rural areas (Mitter and Putcha, 2018).

‘Greater financing can improve access to pre-service training and ongoing professional development opportunities.’

On average, low-income countries allocate only 2.9% of total education spending to pre-primary education – well short of the recommended benchmark of 10%. The limited data available suggest that there is similar underinvestment in more comprehensive early childhood development services (Zubairi and Rose, 2017).

Current underinvestment may reflect perceptions among governments, programme managers, and even parents that working with young children is little more than babysitting, rather than a profession that requires skills, competences and ongoing support. Such perceptions may also help to explain why available funding is often used to expand access to services rather than improve quality – hiring new staff and opening new centres, rather than training and supporting existing personnel.

Ghana, for example, has rapidly expanded pre-primary education over the past decade – but despite government efforts to support workforce development, about a quarter of kindergarten teachers remained untrained (Putcha, 2019a).

In many countries, parents pay for child care and pre-primary education, so investments in pay, training and working conditions may lead to higher fees unless offset by government subsidies. To avoid burdening lower-income families, workforce development efforts should therefore be situated within a

broader financing strategy. Recognising that parent fees alone cannot cover the full cost of quality provision, the Education Commission has called for countries to provide two years of free pre-primary education (International Commission on Financing Global Education Opportunity, 2016).

Principles for sustainable financing of the workforce

Fortunately, a number of countries have successfully secured – and rationally allocated – funds to recruit and retain a strong early childhood workforce. From a recent review of country experiences, conducted under the Early Childhood Workforce Initiative, three principles emerge.

1 Make a stronger investment case to policymakers for prioritising workforce development

The returns on investing in early childhood development are well established (Garcia *et al.*, 2016). As Richter *et al.* note (2018), providing a minimum package of early childhood development services would require 2.7% of GDP (with aid) for low-income countries, 1.2% for lower middle-income countries and 0.8% for upper middle-income countries. Their call for a minimum global benchmark of 1% of GDP represents an important call to action that holds the potential to enhance the quality of services in many countries.

A significant proportion of new financing needs to be directed toward workforce development. For that reason, the ILO has proposed (2012) that governments invest at least 1% of the teacher payroll per year to support in-service training of teachers across all levels, including pre-primary education.

Encouragingly, advocates increasingly have more data, evidence and country examples upon which to make the case for more financing, thanks to analyses coming from initiatives such as the Early Childhood Workforce Initiative, the Education Workforce Initiative, and the Global Social Service Workforce Alliance. And there have been recent examples of countries meaningfully increasing investment. For example, in Ecuador, government spending on early childhood development more than doubled between 2008 and 2012, which significantly improved pre- and in-training options available to the workforce, among other achievements (Bonsu, 2019).

One effective strategy for making the case to policymakers is to cultivate and leverage influential individuals to act as ‘champions’. This tactic was employed with some success by civil society actors and sub-national government representatives in the Philippines, resulting in more funding for training of personnel in childcare centres (Putcha, 2019c).

Another area with potential is encouraging established trade unions to do more to organise early childhood workers. Unions and professional organisations have effectively mobilised resources for workforce development in the education of older children, but early childhood personnel in developing

‘A significant proportion of new financing needs to be directed toward workforce development.’

countries have been less likely to benefit from workers' rights movements, given their wider diversity and relatively low status (Shaeffer, 2015).

2 Develop budgets that reflect actual workforce needs to ensure quality and equity, and create systems for ensuring budgets are spent appropriately

For the early childhood workforce to be sustainability financed, budgets must reflect their actual needs. This does not always happen, owing to a lack of administrative planning capacity and the difficulty in costing dynamic, complex programmes. For example, in India, scaling of the Integrated Child Development programme has been hampered by budget estimates being calculated based on the number of existing beneficiaries, rather than using census data for children in the target age group (Putcha *et al.*, 2016).

While salaries typically represent the largest share of workforce expenses (Josephson *et al.*, 2017; Gustafsson-Wright and Boggild-Jones, 2018), a range of other costs must be considered, including in-service and pre-service training, supervision, mentoring and materials. Underbudgeting can undermine quality through staff shortages, high turnover, and undertrained personnel. It also forces programme managers and policymakers to find savings, in ways which often lead to inequities in access – for example, allocating insufficient funding to lower-density, more dispersed populations.

Community health worker Rekha Devi talks to a mother-to-be about how she is getting on with her pregnancy



Photo: Trupal Pandya/Bernard van Leer Foundation

Tools such as the Standardized Early Childhood Development Costing Tool, developed by the Brookings Institution, can help improve the precision and comparability of costing efforts within and across countries (Gustafsson-Wright *et al.*, 2017).

Accountability systems are needed to make sure that when sufficient resources are allocated to workforce development, they are not diverted to other purposes. A good example comes from Chile: early childhood services receiving funding under Chile Crece Contigo – an intersectoral, multicomponent child development policy – are required to provide monthly reports which document how money received has been spent (Putcha *et al.*, 2016).

3 Advocate for legislation that institutionalises workforce development programmes

‘One strategy for ensuring sustainability of financing is to institutionalise programmes in legislation.’

Even effective programmes run the risk of not having sufficient funding to continue operations and sustain quality improvement efforts over time – especially when they rely on external funding. One strategy for ensuring sustainability of financing is to institutionalise programmes in legislation. Enacting policies that formally recognise successful pilots or programmes increases the chance that they will be granted a recurring line item in national (or in more decentralised contexts, sub-national) budgets.

For example, since 2014, community health volunteers in Siaya County, Kenya, have conducted home visits where they deliver messages on responsive caregiving and monitor child development as part of a broader strategy of implementing the Care for Child Development package. County officials are now developing a Community Health Services Bill which would allocate budgetary resources for the stipends of these personnel, as well as health insurance (Nurturing Care for Early Childhood Development, online; Putcha, 2019b).

Such efforts to institutionalise workforce development programming into policy can have long-lasting impact, helping them to endure when new political leaders are elected. As beneficiaries grow to expect such services, it becomes more politically unpopular to reduce their funding.

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- The GFF aims to improve reproductive, maternal, newborn, child and adolescent health and nutrition.
- It helps 27 national governments to prioritise investments, increase funding and ensure accountability.
- Examples from Cameroon and Cambodia show how the GFF helps young children survive and thrive.





The Global Financing Facility: investing in the early years

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The Global Financing Facility (GFF) for women, children and adolescents helps governments to prioritise and increase investments in health, nutrition and other critical sectors to ensure that children have the best start in life. The GFF supports governments to bring together partners committed to ending preventable deaths and improving reproductive, maternal, newborn, child and adolescent health and nutrition (RMNCAH-N) and harness their experiences and financial resources.

Launched in 2015 to accelerate progress on the Sustainable Development Goals and contribute to closing the huge RMNCAH-N financing gap, the GFF is a catalytic and country-driven model, which links GFF grant financing to several sources of funding to increase the efficiency and total volume of financing for the health and nutrition of women, children and adolescents.

How does GFF work?

The GFF's partnership with a country centres on its RMNCAH-N investment case, which sets out a prioritised health and nutrition plan for that country. This is developed through

an inclusive process under the leadership of the Ministry of Health (or another relevant sectoral ministry) with the involvement of the Ministry of Finance. A country platform chaired by the government with representation from key health and nutrition stakeholders (such as civil society, the private sector, United Nations and other multilateral and bilateral agencies) designs and oversees the development and implementation of the investment case and the monitoring of its results. This helps to ensure high levels of accountability and transparency.

The GFF plays an important role in financing the health and nutrition priorities identified in the investment case. This is done through direct financing from the GFF Trust Fund which is linked to financing from the World Bank's International Development Association (IDA) and the International Bank for Reconstruction and Development (IBRD), as well as by bringing together multiple other sources of financing, including additional domestic resources for health and nutrition; aligning complementary external financing from bilateral and multilateral donors, foundations, and others; and crowding in global and local private sector resources and innovative financing.

'The GFF seeks to increase the efficiency and total volume of financing for the health and nutrition of women, children and adolescents.'

In all GFF-supported countries, the financing is focused on the specific priorities identified in the investment case to reduce preventable mortality and improve health, nutrition and development outcomes for vulnerable populations of women, children and adolescents. To date, 27 countries¹ are receiving financing from the GFF Trust Fund, with expansion to an additional 23 countries anticipated by 2023.

What about early childhood development?

Since the GFF-supported country investment case identifies vulnerable population groups, gaps in coverage of high-impact interventions, and geographic areas left behind, it is not surprising that the early years have been so important in almost all investment cases and implementation plans to date.

As part of the United Nations *Every Woman Every Child* initiative, the GFF embraces the importance of investing in the early years of a child's life to give all young children access to quality services that improve their health, nutrition, learning ability and emotional well-being. This includes addressing their health and nutrition needs, providing early stimulation and learning opportunities and protecting them from the kinds of stress often faced by children who are displaced, in fragile settings, orphaned, and experiencing abuse or neglect. The GFF supports early childhood development as part of the continuum of prevention and care for pregnant women, mothers and babies during and after birth, and in children's early years through adolescence, with the Nurturing Care Framework (World Health Organization, Unicef and World Bank Group, 2018) providing a helpful roadmap for action.

With a strong emphasis on measurable results, the GFF tracks core impact indicators across its portfolio and the majority are drivers of and linked to

1 These countries are: Afghanistan, Bangladesh, Burkina Faso, Cambodia, Cameroon, Central African Republic, Côte d'Ivoire, Democratic Republic of Congo, Ethiopia, Guatemala, Guinea, Haiti, Indonesia, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Myanmar, Nigeria, Rwanda, Senegal, Sierra Leone, Tanzania, Uganda and Vietnam.

improved early childhood development outcomes. They include maternal mortality ratio, newborn mortality, under-5 mortality, child stunting, moderate to severe child wasting, adolescent fertility and, pending the results of ongoing indicator development research, a measure of child development.

How does GFF support early childhood development?

The GFF fosters an integrated approach to helping children survive, thrive, and transform. This is more likely to generate long-lasting impacts than standalone projects. The prevention of stunting is a necessary – but on its own insufficient – way to achieve healthy child growth and development. Yet efforts to reduce stunting and efforts to scale-up early childhood development services are frequently not coordinated at country level or by the global community, and often lack interventions on both the demand and supply side.

The GFF seeks to address this imbalance in low-income countries, such as Rwanda, and also among underfunded populations in lower middle-income countries, such as Indonesia and Guatemala, which are lagging behind on stunting and other adverse child development outcomes.

In **Cameroon**, for example, child malnutrition remains widespread, a situation that has stagnated for over 20 years and is characterised by enormous disparities. The prevalence of under-5 stunting was 24.2% in 1991 and 32% in 2014. To address the determinants of chronic malnutrition, a combination of IDA financing and GFF Trust Fund resources is supporting increased utilisation and improved quality of health and nutrition services for vulnerable women, children and adolescents.

Nutrition interventions include micro-nutrients for community-based distribution, the promotion of optimal feeding practices for infants and young children during prenatal, delivery and postnatal care, including immediate and exclusive breastfeeding, the management of acute malnutrition and promotion of women's nutrition, notably for adolescents and pregnant women. The focus on improving the nutritional status of adolescent girls prior to the start of childbearing is supported by evidence showing that stunting often begins in utero.

In addition, the project has an innovative component, Kangaroo Mother Care (KMC), supported through a development impact bond. Early attachment and parent-child bonding are key outcomes of the approach, along with reduction of low birthweight and neonatal mortality and improved infant growth and development. By delivering both nutrition and early stimulation services (through support to mothers and other caregivers for responsive child feeding practices and promoting KMC for low-birthweight infants) the GFF is helping to ensure that children in Cameroon will grow and develop to their full potential.

Another example of integrated programming for healthy child growth and development will be scaled-up in **Cambodia**, one of the countries that have

'The majority of core impact indicators are drivers of and linked to improved early childhood development outcomes.'

‘Early child development is at the heart of the Global Financing Facility’s work with governments because of its enormous impact.’

joined the GFF more recently. Although Cambodia has experienced strong economic growth and significant poverty reduction over the past two decades, there is still slow progress on key human capital (health, nutrition and education) outcomes, with major disparities found in rural areas among remote, indigenous and socioeconomically disadvantaged populations. Maternal mortality remains unacceptably high, progress in reducing under-5 mortality has not been matched in neonatal mortality, and high levels of undernutrition in women (underweight, anaemia) and children (stunting and wasting, anaemia) are a significant public health concern.

Analysis of Cambodia’s health system reveals a similar pattern of accelerated progress combined with ongoing deficits. While there have been increases in facility-based deliveries, use of antenatal care, and coverage of polio-3 vaccinations, the availability and quality of crucial maternal and child health services are both still very variable; there is low community awareness of and demand for preventive, promotive and curative health services; and coordination and accountability for improved RMNCAH-N outcomes are limited at all levels.

The GFF will co-finance provision of maternal and child health and nutrition services that aim to address several of the key issues prioritised in the investment case for RMNCAH-N, including the reduction of neonatal mortality and child undernutrition. In addition to the Royal Government of Cambodia, the governments of Germany and Australia have pooled financing through the IDA investment, aligning their resources behind the draft investment case. The investment’s target groups include women who are pregnant or breastfeeding and children in the first 1000 days of life who are living in provinces where health and nutrition outcomes are lagging, poverty levels are high and there are gaps in the supply-side readiness of services.

Prioritised services will increase access to, and the coverage, quality, and quantity of antenatal care, including maternal nutrition; expand the screening, management and treatment of Severe Acute Malnutrition (SAM) nationwide; increase coverage of and access to quality delivery care; increase the availability of growth monitoring and promotion in health facilities and communities; and improve early and essential newborn care practices. The government also seeks to increase the availability and quality of services to promote good nutrition for mothers, infants and young children (including early-initiation and exclusive breastfeeding and complementary feeding) in health facilities and communities; improve quality and quantity of post-natal care; increase the delivery of integrated outreach services; strengthen the quality of the management of sick newborn babies; improve routine immunisation and fill gaps in coverage; and improve the management/prevention of low-birthweight births.

Early child development is at the heart of the GFF's work with governments because of the enormous impact it has – not only on child mortality rates – but also on the ability for children and adults to thrive throughout life.

For more detailed information on the GFF model, please visit the GFF website at: <https://www.globalfinancingfacility.org>

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The Global Scale for Early Development (GSED)

- ▶ Countries need good metrics to track their progress towards early childhood development targets.
- ▶ No reliable, freely accessible tools exist for population-level monitoring of children up to age 3.
- ▶ The Global Scale for Early Development, now being field-tested, could offer a global solution.

GSED team¹

Neuroscientific, biological, genetic and social science research evidence has unequivocally demonstrated that the foundations of adult health, well-being and productivity are formed during the first years of life (Shonkoff et al., 2012). There is growing recognition that protecting, promoting and supporting early childhood development (ECD) not only is possible through intervention and prevention (Engle et al., 2011) but also a priority for the global community. Indeed, never before has the political commitment to invest in ECD been as strongly articulated as it is now.

Sustainable Development Goal (SDG) 4.2, for example, targets universal access to high-quality care in early childhood and pre-primary education as a means for ensuring that all children are ready for school. The UN Secretary-General's Global Strategy for Women's, Children's and Adolescents' Health aims to accelerate progress in ECD with the motto of 'Survive, Thrive, Transform' (Every Woman Every Child, 2015). These efforts have been strengthened by the launch of the Nurturing Care Framework in 2018 by the World Health Assembly (World Health Organization, 2017).

Critically, each of these investments requires that governments and stakeholders implement metrics to track their progress in achieving ECD-related targets and goals. National and global measurement of progress is of critical importance for ensuring and sustaining government commitment to global agendas and goals. In the context of ECD, most existing instruments for measuring ECD were developed in high-income countries. These measures have been adapted and translated by independent researchers for use in non-Western settings, often without external validation. Their length, cost, proprietary restrictions and training demands often make them untenable for the population and programmatic tracking required by the SDGs and by countries interested in investing in ECD programmes.

In the absence of appropriate instruments to measure children developing normally across diverse contexts, proxy measures, such as stunting and poverty, have been used to estimate the number of children not reaching their developmental potential (Black et al., 2017; Grantham-McGregor et al., 2017). However, proxy measures are not directly linked to ECD and not sensitive enough for either adequate population-level tracking and comparisons or

1 This article was prepared by the following authors from the GSED team: Maureen Black, Kieran Bromley, Vanessa Cavallera (lead author), Jorge Cuartas, Tarun Dua (corresponding author), Iris Eekhout, Günther Fink, Melissa Gladstone, Katelyn Hepworth, Magdalena Janus, Patricia Kariger, Gillian Lancaster, Dana McCoy, Gareth McCray, Abbie Raikes, Marta Rubio-Codina, Stef van Buuren, Marcus Waldman, Susan Walker and Ann Weber. The authors alone are responsible for the views expressed in this article and they do not necessarily represent the views, decisions or policies of the institution with which they are affiliated.



Photo: Jon Spaull/Bernard van Leer Foundation

programmatic evaluation. Therefore, additional measures of ECD that can be applied globally at population and/or programmatic levels are needed.

What is the Global Scale for Early Development?

The Global Scale for Early Development (GSED) aims to fill this gap through the development of two internationally standardised and validated measurement instruments for the assessment of ECD for children under age 3 years at population (short form) and programmatic (long form) levels.²

The instruments are being developed by a multidisciplinary team led by the World Health Organization. This work represents the harmonisation of three already existing efforts: the Infant and Young Child Development group, the Caregiver Reported Early Development Instruments group, and the Global Child Development Group (McCoy *et al.*, 2016; Richter *et al.*, in press).

Both GSED instruments are constructed from a common item bank (see box for detailed methodology). The first is a short, caregiver-report instrument intended for population-level measurement to:

- assess and map child development status globally
- draw attention to populations most in need of support, including monitoring the impact of humanitarian emergencies and other crises
- track trajectories of child development over time at a population level, and
- monitor benefits of national-level policies and programming.

The second is a longer instrument for programme evaluation that combines direct assessment and caregiver report to quantify the impact of an intervention on early developmental outcomes. Both forms are developed to be culturally neutral (they can be used globally, with minimal adaptation beyond translation, and relevant across different contexts); easy to administer; open access and freely available; acceptable and understandable to caregivers and children; and easily interpretable by policymakers and programme personnel.

The instruments are designed to be holistic measures of ECD, to be interpreted at the population or group level. They are not intended for individual diagnosis of children nor for individual screening. The data collected with GSED will provide the conceptual and empirical basis for the future development of 'norms' that can be used to monitor the proportion of children who are developmentally on track.

'Additional measures of early childhood development that can be applied globally at population and/or programmatic levels are needed.'

² The authors gratefully acknowledge the support provided by the Bill and Melinda Gates Foundation for the development of GSED and its field testing.

Methodology: how the GSED scale and instruments were created

The GSED team developed the target product profile describing the expected aims, uses, and validity and reliability standards of the final instruments. The item bank was constructed based on the previously gathered cross-sectional and longitudinal data by the three different efforts including data from 51 cohorts in low- and middle-income countries using 22 established ECD instruments (with 2275 different developmental items) representing over 73,000 anonymised children with 109,079 assessments.

Over several iterations of independent judgements from six subject matter experts, a mapping process (Lancaster *et al.*, 2018) was implemented to develop bridges between existing ECD instruments by linking similar items across instruments into 'equate groups'. In a subsequent statistical modelling step, the fit of two statistical models was compared to the combined dataset: (a) a Two-Parameter (2PL) Logistic Item Response model; and (b) a Rasch model. The results of the two approaches were comparable.

Given its interpretability and theoretical and computational parsimony, a unidimensional Rasch model was ultimately selected. For each instrument, subject matter experts then reviewed the items that fitted this Rasch model for inclusion in the GSED, based on each item's age and domain representation, feasibility, and developmental and cultural appropriateness. This full set of GSED items will be further examined in a subsequent field-testing phase.

Given the properties of the Rasch model, the scores from the GSED are intended to represent a single, continuous, latent trait of ECD, which we are terming a developmental D-score (Jacobusse *et al.*, 2006; Jacobusse and van Buuren, 2007; van Buuren, 2014). This D-score can be standardised by age to create a Development-for-Age Z-score (DAZ), which is similar to anthropometric measures such as Height-for-Age Z-score (HAZ) and Weight-for-Age Z-score (WAZ), and which could be used to compare children's development across diverse global contexts.

An advantage of an IRT/Rasch based approach, which will be further explored in field testing, is that tablet-based adaptive testing can be implemented. Initial simulations show great promise in considerably reducing participant and administrative burden while maintaining test reliability.

'Three countries have been identified for field testing and other countries and additional funding opportunities are being explored.'

Immediate plans and future direction

We propose to evaluate the psychometric properties of the GSED instruments through field testing in at least six countries (over 1500 children per country). The aim is to identify countries that are diverse in terms of geography, language, culture and income, to evaluate the instruments' reliability and validity, including short-term predictive validity, and sensitivity to child age and contextual environmental factors, such as maternal education and children's nutritional status.

Three countries have been currently identified for field testing (Bangladesh, Pakistan and Tanzania) and other countries and additional funding opportunities are being explored. After field testing and careful analysis and revision, the administrative and training materials for the GSED will be made available for global use. Future work may include further field testing in other regions of the world and the development of recommendations for organising and reporting the metrics necessary for country-level decision making and global SDG reporting.

We are committed to collaborating with other organisations interested in measuring children's development, including Unicef, the World Bank, UNESCO, Inter-American Development Bank and others who are interested in population-level monitoring. We will ensure transparency and foster alignment across instruments with the ultimate goal of integrating measurement of children's development from birth to 8 years, to promote the use of systematic data to track children's progress within countries and globally. In doing so, the GSED will serve as a global resource for rigorous, interpretable, and actionable measurement of developmental well-being during the critically important early years of life.

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Using the power of mass media to achieve impact at scale: an experiment that worked

- ▷ In its 50th anniversary year, *Sesame Street* is the world's largest informal educator.
- ▷ International versions of *Sesame Street* are informed by local partners and rigorous research.
- ▷ From radio to YouTube, media is a cost-effective way to scale early childhood education.

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It started with a simple yet revolutionary idea: use television to help less-advantaged children learn, so they could begin school as well prepared as their more-advantaged peers. Fifty years later, *Sesame Street* reaches children in 150 countries with lessons not only about letters and numbers, but about important socio-emotional skills they need to thrive. Sesame Workshop has become the world's largest informal educator.

Since *Sesame Street*'s creation in 1969, our theory of change has remained the same: if access to education determines futures, then media delivering educational content to broad audiences can spread life-changing opportunity. And while *Sesame Street* was designed for children in the USA, soon countries like Brazil, Germany and Mexico wanted this groundbreaking mix of learning and fun for their children. Because of the characters' universal appeal, the *Sesame Street* Muppets had a unique ability to cross borders, and *Sesame Street*'s creators learned that their model could scale to reach children in some of the most under-resourced regions of the world, many of whom had no other means of quality early education.

Today, in countries like Afghanistan, Bangladesh, and India, we produce completely localised versions of *Sesame Street*, working with partners on the ground to create adaptations tailored to the local language and culture, with characters and storylines that children can relate to. International co-productions share the *Sesame Street* model and core educational goals, but the specific curriculum for each country is tailored to the unique needs of children there.

No matter the environment, media and Muppets have proven to be a powerful means to provide high-quality early learning at scale. Over a thousand studies can attest to Sesame's impact. A 15-country meta-analysis on the effects of watching *Sesame Street*, spanning from South Africa to Bangladesh, found an effect size of 0.29 across learning outcomes, comparable to those of early childhood interventions in developing countries (Mares and Pan, 2013). Multiple evaluations confirm the effectiveness of localised *Sesame Street* content in a variety of learning outcomes, including health, literacy, maths, and prosocial behaviour.

Mass media is inherently scalable, but we have identified three necessary components for reach and impact: research, distribution and partners. First, everything we do is grounded in research and tested along the way. Second, we must reach to teach – which means using creative distribution methods to reach children wherever they are. Lastly, to serve the most vulnerable populations, finding the right partners is key.

Our methodology: the Sesame Process

Sesame Workshop has always focused on a child's earliest years, when we can have the greatest impact. We create our content – tackling even the most difficult issues – from a child's perspective. And everything we do is guided by a rigorous, research-driven process. As co-founder Joan Ganz Cooney has often said, 'Without research, there would be no *Sesame Street*.'

We use research to tailor content to children's needs. Each project starts with careful analysis: what specific challenges face the children we hope to reach? Where and how can Sesame uniquely play a role? Next, we meet with local experts including educators and early childhood development specialists to advise us in developing a bespoke and culturally resonant curriculum with

A repurposed vegetable cart equipped with a TV and DVD player brings early learning to children in India



measurable learning objectives. Formative research then informs content production, guiding the writers, artists and performers who bring every Sesame programme to life. Once a programme or initiative is launched, we conduct summative research and impact evaluations to learn what works and what doesn't. We continuously iterate to improve, and view every season of *Sesame Street* as a new experiment – a constant loop of measuring, learning and iterating.

This process is underway with our programme to provide early education to children affected by the Syrian refugee crisis, in partnership with the International Rescue Committee (IRC) – a programme first piloted with support from the Bernard van Leer Foundation and Open Society Foundations. In 2017, the MacArthur Foundation awarded Sesame Workshop and the IRC a landmark grant of USD 100 million to scale our programme and create the largest early childhood intervention in the history of humanitarian response. Through the power of mass media, with a new Arabic language version of *Sesame Street*, *Ahlan Simsim*, as well as through direct, in-person services for the most vulnerable children, we will reach millions of children and families in Iraq, Jordan, Lebanon and Syria with quality early learning.

Building on the research conducted for our pilot in Jordan, we began with an assessment of the needs of displaced and host-community families in our target countries and consulted with local experts to lay a foundation for our curriculum-driven, culturally relevant programming. Research informed the adaptation of Sesame materials like storybooks, posters and video clips, all being integrated into the IRC's preschool classrooms, health centres, home visiting programmes, and more. Ahead of the autumn 2019 launch of our new Sesame television programme, *Ahlan Simsim*, extensive research, testing, and work with advisors informs everything from our educational framework to the design of our new Muppet characters.

Our programme is designed to serve as a scalable model. We enlisted New York University's Global TIES for Children as our independent evaluator, conducting a multi-year, evidence-based research and evaluation programme to measure the success of our approach. Given the dearth of early education research in crisis settings, summative research is a critical deliverable of our programme – the university's five planned rigorous evaluations will double the existing evidence base on what early education programmes are most effective in crisis settings, enabling others to learn from our work.

Last year, the LEGO Foundation was first to step up and meet the MacArthur Foundation's call for the bold philanthropy needed to transform the way the humanitarian system serves children affected by crisis. They provided a grant of USD 100 million to support children affected by the Rohingya and Syrian refugee crises with play-based learning. In partnership with the IRC in the Syrian response region and BRAC in Bangladesh, we will develop, test, and refine learning through play programming models for young children affected by displacement, enabling this work to be scaled and replicated in other contexts.

'Sesame Street reaches children in 150 countries with lessons not only about letters and numbers, but about the socio-emotional skills they need to thrive.'

You must reach to teach

When it comes to content delivery, our commitment to meeting children where they are requires flexibility; no two distribution models are exactly the same. *Sesame Street* was launched using the cutting-edge technology of the time, television – and while today we use every media platform, from television to digital to mobile, sometimes the best way to reach the children who need us most requires a lower-tech approach. Whether it's battery-operated projectors in classrooms in refugee settlements, or a repurposed vegetable cart equipped with a television and a DVD player in slums in India, we're continually assessing the most effective platforms to reach our target audience.

In Afghanistan, *Baghch-e-Simsim*, the local version of *Sesame Street*, finds its way to children through television, radio, YouTube, and even a free mobile service that enables families to simply dial 1234 on their phones to listen to episodes. Community viewings bring together hundreds of children, caregivers and teachers to watch episodes and participate in corresponding activities to reinforce educational messages. By 2017, over 3.1 million children age 3–7 were tuning in. And *Baghch-e-Simsim* isn't only engaging children: more than 70% of our audience watches with a parent or caregiver, further deepening learning outcomes.

'Each project starts with careful analysis: what specific challenges face the children we hope to reach?'

Finding the right partners

We can't reach vulnerable children at scale single-handedly, so we seek partners who share our values, complement our strengths, and contribute different skills, ensuring a greater combined impact. From our work with the IRC and BRAC to organisations like World Vision, we partner with direct service providers to integrate Sesame content into their day-to-day work, empowering them with high-quality resources and enhancing their services. In thus leveraging our proven educational content – both newly created and evergreen materials produced over decades – we deepen our partners' reach and broaden our own.

In the USA, through our *Sesame Street* in Communities programme, we partner with both national organisations like Head Start and local social service providers to bring research-based Sesame resources covering everything from the academic basics to physical, social and emotional health straight to the caring adults in children's lives. We also provide free training and professional development resources to address children's developmental, physical, and emotional needs and give them the tools they need to help children and families overcome specific challenges.

Using the power of our engaging Muppets, our resources are designed to build coping skills and foster nurturing connections between children and caring adults, whether they're parents, teachers, or social workers. That's where Sesame's deliberate appeal to adults gives us an advantage. *Sesame Street's*

creators always believed that the learning would be deeper if an adult were watching with a child, which is why we've always featured humour, celebrities and parodies appealing to adults. Our content becomes both a tool for a parent or provider, and a catalyst for engagement between adult and child, further deepening our impact through the help of partners on the ground.

Conclusion

Sesame Street's founders once asked if television could be used to give less-advantaged children the educational foundation they needed to arrive at school ready to learn. Fifty years later, we've proven media's ability to deliver high-quality early learning at scale worldwide. Media remains the most cost-effective means to scale early childhood education and, moreover, it proves to be a powerful catalyst for the all-important adult-child engagement that carries learning off-screen. As caregivers interact with children around Sesame content, their ongoing engagement meaningfully extends our educational impact.

'Our commitment to meeting children where they are requires flexibility; no two distribution models are exactly the same.'

So, with an enduring commitment to our mission to help children everywhere grow smarter, stronger, and kinder; to our proven method; and to strong partnerships, we will be using media to bring critical early education on a mass scale to children around the world for the next fifty years and beyond.

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Before good practices can be taken to scale, we first need good ideas. In this section, we focus on innovations – new or emerging programmes, policies or services which have the potential to meet the needs of young children and their caregivers in a wider range of contexts.





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Empowering frontline early childhood workers through technology in India

- ▶ India's government is using mobile technology to address stunting, anaemia and low birthweight.
- ▶ Software called ICDS-CAS helps to give information, organise frontline workers and track results.
- ▶ Already used by 120,000 frontline workers, the ICDS-CAS system is being rolled out across India.

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Innovative technology can enable more effective and efficient service delivery, improve supervision and monitoring, and facilitate the use of data in decision making. India's use of mobile technology in POSHAN Abhiyaan, a government programme to combat malnutrition, offers lessons on how other programmes for children and families can put digital technology to effective use.

POSHAN Abhiyaan delivers services to young children, adolescent girls and women in the nutritionally critical first 1000 days of a child's life, from conception to 2 years. Implemented by the government's Ministry of Women and Child Development, through its Integrated Child Development Services (ICDS) programme, POSHAN Abhiyaan has three chief aims: to bring down stunting in children under 6 years old, anaemia among women aged 15–49, and the incidence of low birthweight.

ICDS employs 1.4 million community health workers, known as *Anganwadi* workers. Selected from the local community, their responsibilities include supplementary nutrition, immunisation, periodic health check-ups, and counselling through home visits.

The ICDS-CAS system

POSHAN Abhiyaan uses an innovative system called ICDS-CAS (Common Application Software), comprising a mobile app and web-based dashboard, to help *Anganwadi* workers to deliver services, and programme supervisors and officials to track performance and take informed decisions.

Scale-up began in March 2018, after testing in districts in seven states. The mobile app works offline, so *Anganwadi* workers can still enter data in their smartphone when beyond the reach of the mobile network, and it will be uploaded when they get back online; the app is multilingual and makes use of multimedia. The ICDS-CAS system offers benefits for beneficiaries, frontline workers and their supervisors and officials:

Beneficiaries: The system can be set up to send tailored SMS alerts to mothers-to-be and parents of young children, for example reminding them to bring their child to be immunised or informing them about community events.

Anganwadi workers: These frontline staff previously had to maintain 11 paper-based registers. All but one of those have been replaced by the ICDS-CAS application on a smartphone. In their app, the workers see eight modules: household management, home visit scheduler, daily nutrition, growth monitoring, take-home rations, due list, Anganwadi centre management and monthly progress report. These modules are designed to make the workers' job easier in a number of ways: data entered into the household management module, for example, auto-generates prompts in the home visit scheduler – making sure, say, that the worker knows that on this particular visit she should ask the mother how she is doing with breastfeeding.

Supervisors: Supervisors are responsible for overseeing groups of 20–25 Anganwadi workers, called sectors. In their version of the ICDS-CAS app, the supervisors see a checklist which allows them to identify how the individual workers are performing, and provides data to inform discussions at monthly sector meetings.

Officials: The mobile application feeds into a web-based dashboard that makes real-time information available on service delivery and the nutrition status of beneficiaries, enabling officials at block, district, state and national levels to monitor the programme's progress. This improves management and facilitates early identification of gaps for timely decision making and action.

'The system provides real-time information, enabling officials to monitor the programme's progress.'

How the application was rolled out

Step 1 Application design

The design drew upon a small mHealth (mobile health) randomised controlled trial, in the Saharsa District of Bihar, northern India, led by the Bill and Melinda Gates Foundation with partners CARE India and Dimagi. The pilot application was then customised to the requirements of the ICDS programme.

Step 2 Procurement and hiring

The procurement of mobile phones and the required support infrastructure (such as servers, cloud storage for data, etc.) was critical. Equally important was the hiring of technical workers to manage technical issues. Helpdesks, comprising one or two people, were required at the state, district and block levels.

Step 3 Training of workers

This was delivered in a cascade manner, starting with the training of master trainers who in turn coached Anganwadi workers. First-time users were allowed to learn and assimilate the technology at an easy pace. The central training agency also directly trained the ICDS supervisors, block and district officials, and helpdesk personnel.

Step 4 Using data for decision making

The roll-out is complete only once the Anganwadi worker starts using the application and ICDS officials start reviewing the dashboard to monitor progress.

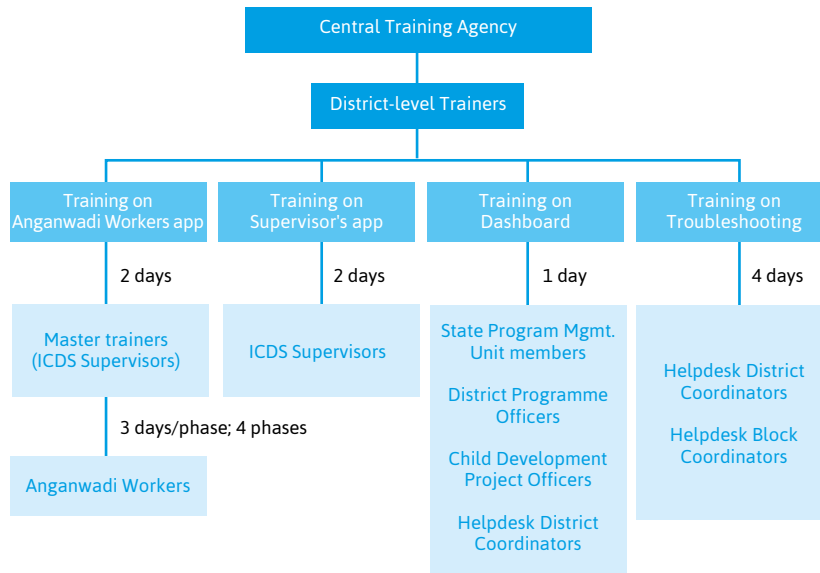
The system quickly became accepted

A process evaluation of the ICDS-CAS system was carried out from September 2017 to February 2018 in the states of Madhya Pradesh and Bihar. Conducted by independent external evaluators – a team from the International Food Policy Research Institute, the University of California (San Francisco and Berkeley), and Neerman – supported by the Gates Foundation, it found that the system had quickly gained widespread acceptance: ‘Within a month, phones were replacing registers,’ said a state ICDS official.

The evaluation showed that 80% of the *Anganwadi* workers included in the study were using the application effectively every day; 94% of workers correctly identified the home visit scheduler, with over 80% correctly identifying the symbols signifying the timeliness of home visits. ‘Earlier, I had to see the growth chart to know which child had lost weight, or in which group to include it. But now it is shown directly in the app,’ said an worker in Madhya Pradesh.

The beneficiaries also attest to the positive impact of the programme in the last six months. A state ICDS official in Madhya Pradesh reported that the application had introduced a focus on quality: ‘With this system, I get a complete dataset on the dashboard at one place which helps me prioritise the interventions to be made,’ the official said.

FIGURE 1
Training on use of the
ICDS-CAS software



Lessons learned and the way ahead

Any programme rolled out on a record-breaking scale is bound to run into challenges. The need for improvements to the dashboard has been almost

constant since roll-out. The focus so far has mostly been on outcomes, but for practical follow-up the inclusion of service delivery indicators becomes important.

Planning and budgeting for infrastructure, both hardware and human resources, is critical for scaling up. Design changes are needed to make data access easier. A conscious effort also has to be made to create a culture of using data for decision making so that periodic reviews can be institutionalised. And for greater sustainability and scaling-up of the programme, it is important to transition it from externally financed grant support to direct on-budget support.

Today the ICDS-CAS system is being used by 120,000 *Anganwadi* workers, with plans to scale it up to all 1,400,000. Even at its current scale it is already one of the largest deployments of mobile technology in public health and nutrition programme delivery in the world. It is expected to cover all 36 states and union territories and 718 districts of India by 2022.

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NOTE

The views expressed in this article are entirely those of the author. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organisations, or those of the Executive Directors of the World Bank or the governments they represent.

The ICDS-CAP app showing a home visit scheduler



mThrive: a nurturing care app that supports community health workers

- ▶ Community health workers can help promote early childhood development outcomes.
- ▶ Mobile apps to support community health workers typically focus only on maternal and child health.
- ▶ An innovative collaboration is testing an mHealth app to promote nurturing care in Kenya.

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In many low- and middle-income countries, community health workers (CHWs) are the touchpoints between the health system and caregivers, infants and toddlers. Alongside their core responsibilities – health promotion and delivering basic treatments (Barger et al., 2017) – they are increasingly being asked to take on new tasks, including antenatal and postnatal services (Kirkwood et al., 2013), disease surveillance, supporting anti-retroviral compliance (Mwai et al., 2013), and deworming (Clohossey et al., 2014).

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CHWs are also being tasked with promoting optimal child health and development, with some promising impacts, as seen in Pakistan (Yousafzai et al., 2014). However, there are concerns about asking more and more from this overstretched cadre (Tomlinson, 2018). CHWs are frequently under-staffed, poorly paid, and not always provided with the necessary tools and resources (Cometto et al., 2018).

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New tools for supporting this cadre are emerging, including mHealth platforms, which use smartphones as job aids. They can assist with prioritisation, tracking, workload management and decision making. For example, they can enable local clinics to alert CHWs to newly pregnant women in their catchment area. They can keep supervisors informed about workload and performance in real time. They can guide CHWs through evidence-based workflows, helping with screening and diagnosis while also collecting data.

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When combined with other interventions – such as improvements to pay, training and supervision – mHealth platforms are showing encouraging results and their use is growing rapidly (Sondaal et al., 2016).

Developing an mNurturingCare app

So far, the focus of most mHealth approaches has been health (Braun et al., 2013). Support for early childhood development has generally been limited to nutrition screening and counselling. With growing recognition of the need to move from 'survive' to 'thrive' (Braun et al., 2013), in 2018 we convened an innovative collaboration among the following organisations:

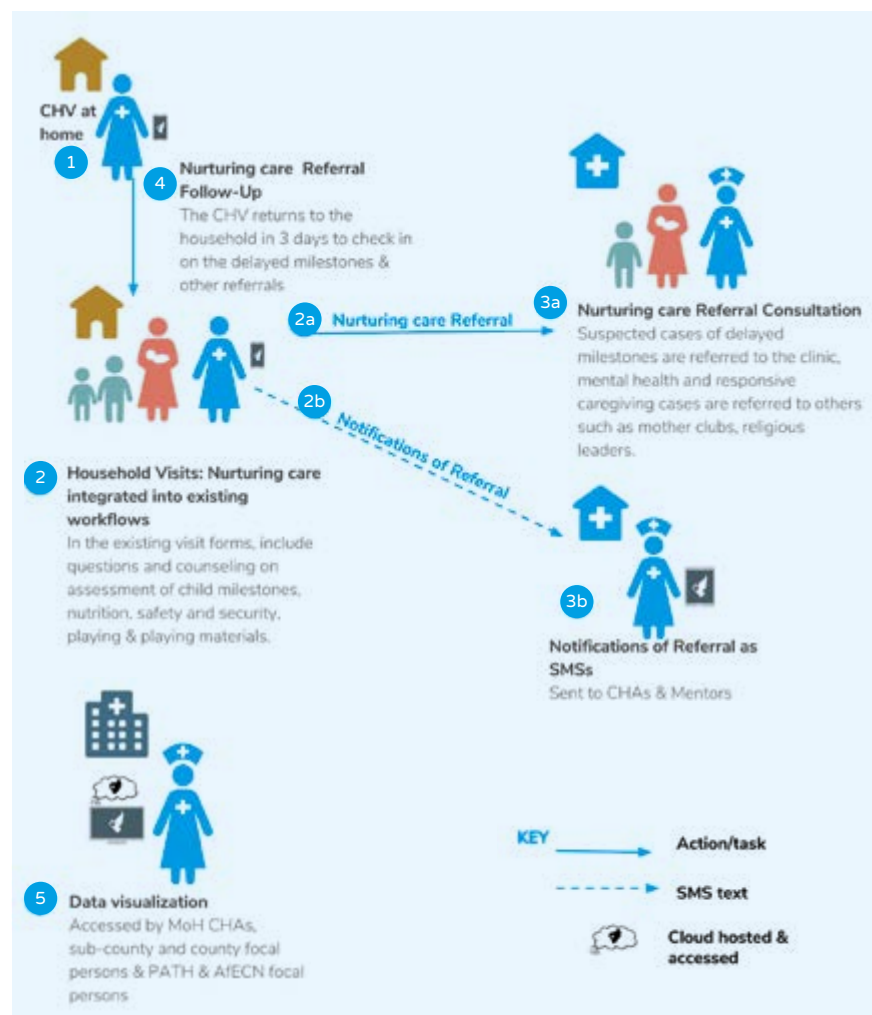
- Medic Mobile – with digital health solutions supporting over 25,000 CHWs in 23 countries, they brought expertise in mHealth application development, deployment and testing, and an opportunity to field test within an existing planned deployment in Siaya County, Kenya (Medic Mobile, online).
- PATH – with their pioneering work to integrate nurturing care into health systems, they brought tools, strategies and content in traditional ‘analogue’ capacity development approaches, such as training, supportive supervision and hard copy job-aids, as shown in Figure 1 (PATH, 2012).
- The African Early Childhood Network (AfECN) – with their work to scale-up innovative approaches in early childhood development, they brought expertise on capacity development and policy engagement across Africa (AfECN, online).



FIGURE 1
Conventional ‘analogue’ job aids

As summarised in Figure 2, the aim of the mNurturingCare app was to build promotion of responsive caregiving into clinical encounters and use the mHealth platform for basic developmental screening and referral where needed. For example, during antenatal visits, content on child health and development is built into workflows, as well as communicating the rationale for breastfeeding; the application prompts health workers to discuss the importance of talking, singing and playing for children's development. Postnatally, the application encourages them to assess interaction between caregiver and baby, and to offer coaching on play and stimulation. The content and workflows were developed with the participation of end users from the start. Workshops were held in Siaya County and the urban context of Nairobi County. Over several iterations of the app, content was simplified and clarified, referral triggers more clearly signalled, and a dashboard developed to present the information that supervisors needed. Initially 30 health workers, known as Community Health Volunteers (CHVs) in Kenya, were trained in each location, and they used the app for four weeks.

FIGURE 2
Content and work flows of the
mNurturingCare application



 **Pregnancy follow up**

Responsive Caregiving - The companion

Is Anyango oloo's companion present during this session? *

☐ Yes

☒ No

****Observe how the pregnant woman interact with the unborn baby ****

Emerging insights from field testing

Follow-up focus group discussions were overwhelmingly positive, especially among younger and tech-savvy CHVs. They appreciated the advantages over hard-copy registers and logbooks, and did not seem to resent the application reducing their work to being about following algorithms – although this may reflect the quality of the pre-deployment training.

We cannot remember everything. Since when we got this app we do not leave anything out and we are able to give all the information to the caregivers. It has made our work easier, no more hard copy. ... I was pleased when a mother delivered and when I clicked, I found it automatically updated unlike previously when you had to register the baby again.

Interestingly, the mHealth technology seemed to enhance their social status:

When community members see you having and using a phone, they rate you somewhere, not just as a mere [CHV].

Hardware and connectivity posed some challenges: the app worked slowly on older phones, and in many areas video content could not be reliably accessed.

... one challenge is on the phone battery for those in rural areas without power connection who have to charge in kiosks with power.

Data protection and security will require appropriate policy and regulatory frameworks. However, CHVs highlighted the value of digital systems in ensuring data integrity:

You can't cook the data [with the app] ... You have to actually go to the households!

The pilot was also a reminder that strengthening CHV capacity can expose weaknesses elsewhere in the health system: CHVs using the app could effectively screen for child development concerns, but this then exposed limitations in access to skilled child development specialists for follow-up assessments and intervention.

Next steps

Further work on mNurturingCare is currently underway. Data is being reviewed to see if the app affects the length and number of consultations a CHV conducts in an average workday. Discussions with the Ministry of Health are exploring the potential for further deployment in Kenya as part of the 2014–2019 National Community Health Strategy, national nurturing care implementation, and plans towards achieving universal health coverage.

There are also opportunities to work in other countries that are currently scaling-up mHealth (but with a focus on health rather than broader child development), and those who are currently working to integrate nurturing care into their health systems, (but without digital tools). We are also comparing

lessons learned with others attempting to integrate nurturing care into mHealth platforms, such as D-tree in Zanzibar (D-tree International, online).

It remains important to test whether mNurturingCare can deliver additional impact compared to simply training, supervising and paying CHWs properly. Nevertheless, in an increasingly digital world, there seems to be considerable potential for mNurturingCare to support community health workers to improve early childhood development.

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LEAPS: a strategy to benefit young children and youth

- ▷ Pakistan, like many countries, faces challenges with both youth unemployment and early childhood provision.
- ▷ LEAPS aims to improve access to quality early childhood services and promote youth skills.
- ▷ Pilot evaluation finds recruitment, mentoring and community acceptance among success factors.

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Investments in programmes for young children, adolescents and youth are critically important to prepare the next generation with the knowledge, competencies and skills to contribute to social and economic development in their communities. Unfortunately, access to early childhood care and education (ECCE) opportunities remain limited: only 33% of 3–4 year olds in low- and middle-income countries attend ECCE services, inequalities in education persist in adolescents (10–19 year olds) and youth (15–24 year olds), and 30% of youth are neither in employment, education nor training. The United Nations Sustainable Development Goals (SDGs) recognise these interrelated challenges and promote lifelong learning starting at birth (Goal 4), and economic development for young people (Goal 8). Directly addressing Goals 4 and 8 of the SDGs, LEAPS (Youth Leaders for Early Childhood Assuring Children are Prepared for School) is an innovative youth-led strategy designed to improve access to quality ECCE services as well as promoting skills development for young people.

Why a cross-generational approach for early childhood and youth development?

The SDGs encompass lifelong learning from birth to youth and adulthood (SDG 4) and economic opportunities for youth (SDG 8). Cross-generational approaches offer new avenues for simultaneously supporting the development and learning of young children and youth. The first five years of a child's life are a sensitive period of brain development when interventions such as ECCE can reduce the risk of poor development and establish a strong foundation for lifelong learning and well-being. Late adolescence and youth are also periods of sensitive brain development, when more complex learning and social-emotional growth occur. In both periods, executive functions develop (for example, regulation of emotions, social skills, reasoning and problem-solving skills) which are essential for success in school and at work, and for fostering healthy and happy relationships (Centre on the Developing Child, 2012). Cross-generational programmes that train youth to deliver ECCE can strengthen their executive functions, which in turn benefits the development of the young children they support. From a programmatic perspective, cross-generational innovations can both increase access to quality ECCE providers and services (Black *et al.*, 2017; Richter *et al.*, 2017) and offer new opportunities for employment, education and training for youth living in rural communities (Patton *et al.*, 2016).

Like many other low- or middle-income countries, Pakistan faces challenges in providing adequate services for young children and youth; for example, in 2013 only 23.7% of 4 year olds were in preschool, with disparities for girls, children living in rural communities, and children from the poorest households (Unicef, 2013). Young people comprise 33% of the Pakistani working-age workforce, and youth employment, education and training opportunities are in high demand (Mahmood, 2011). It was in this context that LEAPS was developed and piloted.

LEAPS: youth-led early childhood care and education in Pakistan

LEAPS was developed following formative research with families, youth, communities and local government to characterise enablers and challenges to implementation and to inform the content of the curricula for children and youth. Successful features of youth-led services were identified from the literature and used to develop LEAPS. Key features identified included an intention to benefit youth participants' communication and leadership skills and access to mentoring (Ponguta *et al.*, 2018). Interviews with community stakeholders explored the challenges and enablers for young children's participation in ECCE and the acceptance of youth as ECCE service providers. The ECCE curriculum was developed through a review of global best practices, and aligned with the Government of Pakistan's school readiness indicators for the early years.

LEAPS was implemented in nine villages in Sindh province (January 2016 to March 2017) in partnership with a district office of the National Commission



‘Interviews with community stakeholders explored the acceptance of youth as early childhood service providers.’

for Human Development (NCHD). The local community provided space for the ECCE centres, while the LEAPS team provided the furniture, learning materials, training and mentoring.

Female community youth leaders (CYLs), aged 18–24 years, were trained to deliver ECCE. The CYLs received a one-month basic training, including classroom practice. Following the basic training, CYLs received twice-monthly on-the-job coaching and mentoring visits from a LEAPS mentor and participated in Communities of Practice to support professional development. CYLs received a monthly stipend and transport support to enable their participation in training sessions and meetings.

The CYLs ran two classes per day, five days per week. Each class ran for three hours for 20 children. To ensure community engagement, family members were invited to spend time and volunteer at the LEAPS centres. Regular parent meetings were organised, as well as meetings of the CYL with the village community primary school teacher and community health worker, distribution of LEAPS newsletters, and town hall meetings with district officials.

Lessons learned from the LEAPS pilot

The LEAPS programme was evaluated in a randomised controlled pilot trial. Benefits were found on children’s school readiness and for the CYLs. The following characteristics were identified for implementing a successful youth-led ECCE programme (Yousafzai et al., 2018; Franchett et al., in press).

Recruitment of CYLs

Common traits in the shortlisted candidates were: an expressed desire to continue their learning and education; creativity; and a sense of responsibility to contribute to their community’s development. Candidates participated in a one-day workshop for recruitment based on their attitudes and comfort level when working with young children; their observation and communication skills; their creativity; and their ability to work in a team.

Important components of the CYL training and mentoring

In addition to training to deliver quality ECCE, the training and mentoring programme focused on the professional development needs of the CYLs. This included managing stress, career counselling, and problem solving to deal with challenges encountered in families and communities with respect to pursuing training and employment opportunities.

Benefits for the CYLs

We found a range of professional and personal benefits for the CYLs, such as critical thinking skills, peer and social support, and an increased perception of empowerment, self-efficacy and independence. In addition, some CYLs expressed an intent to pursue higher education after their participation in LEAPS, while others shared how their taking part in LEAPS had led to other girls and young women in their families being able to pursue employment and education opportunities.

Building acceptance in the community for youth-led ECCE

Community support for and acceptance of youth-led ECCE were essential for the success of the programme. Parents of young children need to trust and value the ECCE provider; therefore, community participation in recruitment, community sensitisation, and opportunities for CYLs to engage with the community throughout the programme were important elements of LEAPS.

Next steps

The LEAPS project team is working on two initiatives:

- 1 Funded by Dubai Cares and the Saving Brains programme from Grand Challenges Canada, we are working in partnership with the NCHD in Pakistan to implement LEAPS in four districts there. The first goal is to evaluate the impact of LEAPS at scale, and the second is to build readiness in a government system to implement, monitor and improve programme quality.
- 2 Funded by the Hecht Global Health Faculty Network Award and the Jacobs Foundation, at Yale University, we are conducting a formative assessment with local stakeholders to determine the feasibility of implementing and adapting LEAPS for the Colombian context.

Overall, youth-led ECCE may be an attractive option for countries where employment and training opportunities for youth are limited and gaps in the coverage of quality ECCE services remain substantial.

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From little ripples to big waves: comprehensive early childhood programming for young refugee children

- ▶ *Adaptable programme for young children in emergencies or forgotten crises.*
- ▶ *Little Ripples curriculum incorporates play-based learning and mindfulness.*
- ▶ *Assessments show improved learning outcomes and social-emotional development.*

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Levels of displacement are the highest on record: as of February 2019, 68.5 million people worldwide have been forcibly displaced, of whom 25.4 million hold refugee status – over half of them under the age of 18 (UNHCR, online). An estimated 87 million children under age 7 have spent their entire lives in conflict zones (Inter-agency Network for Education in Emergencies, 2018). Yet humanitarian funding for education – and, especially, early childhood programming – remains alarmingly low. iACT developed the Little Ripples programme to address the needs of young children affected by humanitarian emergencies and forgotten crises.

The history of Little Ripples begins with iACT's work in eastern Chad to support Darfuri refugees, documenting life in the refugee camps to help spur global action. The iACT team asked the Darfuri refugee communities what services they needed and wanted most – the answer was services for young children. As a result, over the next three years, iACT worked with experts and practitioners in the areas of child development, early learning, trauma recovery and mindfulness to develop the Little Ripples curriculum.

To pilot the Little Ripples curriculum, iACT partnered with Jesuit Refugee Service, which provides primary education to Darfuri refugees in Chad. In 2013, iACT identified and trained 14 Darfuri refugee women, and worked with refugee families to set up spaces in their homes to save on the cost of constructing new centres. These in-home centres came to be known as 'ponds'. One pond hosts 45 children living in nearby homes and is supported by two teachers. iACT provided teaching and learning materials and helped to set up a meals programme to provide participating children with nutritional support.

One year after launching the Little Ripples pilot in eastern Chad, iACT conducted an impact assessment developed with the University of Wisconsin Survey Center. Child and caregiver questions were designed to measure the children's learning outcomes and social-emotional development. It was found that children made strong improvements in educational milestones (such as naming colours, counting, identifying animals and reciting the alphabet); children were reported to be less violent with their peers and adults (for example, decrease in kicking, biting and hitting); they exhibited more positive

emotional behaviours (being happier and calmer); and were more likely to wash hands before and after meals. Caregivers also reported that, at home, their child was singing, talking about their activities at the Little Ripples programme and showing an eagerness to return each day.

Based on these findings, iACT was able to refine and strengthen the Little Ripples curriculum and seek funding to continue and expand the programme.

An adaptable, play-based and mindful approach

The Little Ripples curriculum is intentionally designed for use in challenging and resource-poor contexts with children, aged 3 to 5, affected by trauma, displacement and other complex issues. It guides early childhood teachers and caregivers – at any level of education and experience – to deliver play-based learning activities that foster social-emotional development, while using positive behaviour management techniques. It is designed to be integrated with any existing academic or pre-primary curricula and adapted to any context; teachers are encouraged to deliver the curriculum using activities, stories, music and games that are relevant to their culture, language and context.

Play-based learning is key, as growing evidence shows a relationship between play and development in areas including: language, executive functions, mathematics, spatial skills, scientific thinking and social and emotional development (Hassinger-Das *et al.*, 2017). In many cultures, play-based learning is not regarded as an acceptable form of pedagogy. However, Little Ripples teacher training aims to improve understanding of the positive impact it can have on child development and future learning.

The curriculum incorporates mindfulness – a state of mind that can be developed through practices such as: meditation, slow breathing, intentional movement or body scans to support young refugees to:

- 1 find stability and comfort amid the chaos of displacement
- 2 nurture internal peace as a coping mechanism and form of resilience
- 3 build executive functioning and self-regulation skills, and
- 4 learn practices that they can carry with them into adolescence and adulthood.

In a Little Ripples classroom, mindfulness is not practised as a standalone activity; rather, mindfulness exercises are an integral part of daily activities. Teachers guide their students in practising mindfulness techniques in daily ‘welcome’ and ‘goodbye’ circles and lead ‘mindful moments’ throughout the day if they feel their students may benefit from a calming exercise.

Positive impact

In late 2018, iACT’s implementing partner in Tanzania, Plan International, conducted an impact evaluation including individual student learning assessments, surveys and focus group discussions with students, parents and

‘The Little Ripples curriculum guides early childhood teachers and caregivers to deliver play-based learning activities.’

teachers. After participating for four months, approximately 90% of Little Ripples students passed their academic assessment. Parents and teachers reported positive changes in student behaviour, attitudes and cognitive skills, inside and outside the classroom. Students reported feeling safe in their classrooms and happy to participate in lessons. They particularly enjoyed the mindfulness activities, which teachers reported to be helpful for classroom management.

Impacts from assessments in eastern Chad over the last two years have produced similar results, with a clear positive impact on the Darfuri refugee teachers and students. Most caregivers reported an increase in their child's ability to be independent, share toys and get along with others. One teacher observed:

The new method we were trained on to deal with children in a positive way has changed the students. It is something we had not learned before. [Before,] they [students] did not say my name; they did not like me or listen to me. From training we learned to speak with children and be at their level and speak with them peacefully. Now, they see me outside of school and excitedly call me by name; they listen to me and are more excited each day for school.



Looking forward

Over the last five years, Little Ripples has expanded into four refugee camps in eastern Chad, reaching 3000 Darfuri refugee children and training 97 refugee teachers. Little Ripples has been adapted and implemented with Central African refugees in Cameroon and Burundian refugees in Tanzania – training 51 teachers and reaching more than 7000 children. In 2019, iACT is launching Little Ripples in Greece and, moving forward, iACT will explore new partnerships in other crisis contexts.

iACT will continue to work with experts in early learning to ensure the Little Ripples curriculum incorporates the most up-to-date approaches, and will continue documenting its positive impact to demonstrate to donors, humanitarian agencies and field practitioners the need to support, test and document further innovative early learning initiatives with young children in emergency and protracted refugee contexts.

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- Many young children from Myanmar's Rohingya community are displaced in Bangladesh.
- BRAC's Humanitarian Play Lab model promotes healing through culturally rooted play.
- The Humanitarian Play Lab model could be scaled in other humanitarian contexts.





BRAC

Humanitarian Play Lab: when playing becomes healing

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In August 2017, members of the Rohingya community in Myanmar began to take refuge in the neighbouring country of Bangladesh, fleeing unrest and uncertainty. UNHCR now estimates that 906,572 refugees are in the Bangladeshi town of Cox's Bazar, just over the border from Myanmar, and around 55% are under the age of 18 – including accompanied and unaccompanied children, and many young pregnant women. Severely marginalised, then displaced from their home country, many among this population have faced distress, violence, trauma and sexual abuse.

Immediate reaction to this large-scale humanitarian crisis has been to provide emergency support to meet basic physical needs: food and water, hygiene and sanitation. But the children of this community also face serious issues related to psychological distress, vulnerability and trauma. It is critical to protect their fundamental rights. Child-friendly spaces were created within the camps, where children could feel protected and activities incorporating elements of play and healing could be implemented.

Fostering healing through play

Within these spaces, BRAC has implemented its Humanitarian Play Lab (HPL) model. BRAC has been collaborating with the LEGO Foundation since 2015 to promote play as a learning tool in Bangladesh through the development of this model. Play is integral to children meeting their key developmental milestones in their early years. The BRAC Play Lab model incorporates play-based learning in all aspects of its curriculum and is implemented in more than 300 play spaces across the capital city of Dhaka.

‘The model incorporates play-based learning in all aspects of its curriculum.’

The BRAC HPL model is a contextualised adaptation of the BRAC Play Lab model, designed to ensure that vulnerable children aged 2–6 years are provided with a safe platform for healing through play. Play therapy is a curative tool to address children’s behavioural and psychological issues. Play is the way children learn, develop and understand the world around them. It is therapeutic because it helps children express their feelings. Play is instrumental in keeping children engaged, providing stimulation for cognitive and social-emotional development, developing self-regulation and building resilience.

This is especially important for children in fragile settings, where they are exposed to violence and poverty. Play helps such children better manage possible trauma caused by their experiences. By adapting the model to the highly contextualised settings in the Rohingya community, BRAC seeks to provide healing through play for Rohingya children, in a way that improves on traditional approaches to early childhood development, child protection and psychosocial well-being in humanitarian settings. The HPL model is designed to:

- build resilience in children in fragile settings through a focus on early childhood stimulus and the development of self-regulation
- nurture spontaneity through engagement in a culturally relevant play-based curriculum that encourages language, cognitive, motor, and socio-emotional development
- foster a sense of community among displaced peoples by creating a supportive environment for mothers and children, using traditional games, rhymes and activities.

In addition to the HPL model, BRAC has been testing out a home-based early stimulation model for pregnant women and mothers with children aged up to 2 years. Mothers are counselled on various issues related to childcare, maternal mental health, play, and parent–child relationships.

The HPL integrates culture with play

Initial surveys and focus group discussions within the camps revealed that traditions and cultural norms played a strong role in the everyday lives of Rohingya community members. These conversations became a journey of cultural discoveries. Through extensive research, it was discovered that the community believed in collectivism, with practices, stories and rhymes being intergenerational. Three major cultural aspects were identified that could play a great part in healing:

- Folk rhymes (*Kabbiya*) of the Rohingya people play an essential role in children's lives. Community members feel that the words tap into the primal core of the children, and they respond enthusiastically to the rhythm.
- Traditional games and physical play activities brought out the element of spontaneity and joyfulness within the children. These games are usually very detailed, each with its own set of rules and regulations.
- Arts and crafts brought an element of nostalgia for the old home. Culturally significant artwork, floral patterns and motifs gave these displaced children the feeling that home is never far away.

As retaining their identity is a crucial aspect of healing for the Rohingya community, it was essential to integrate cultural and traditional practices in the HPL model through tailored activities and spaces.

The BRAC Humanitarian Play Lab Model is an iterative process, and steps are currently being taken to mould the model further according to community and societal needs. A core BRAC HPL team has been created to oversee all aspects of the project. The curriculum team identifies and incorporates cultural elements that address the key components of healing and play. The research and monitoring group focuses on conducting evaluative research and monitoring in order to assess the impact of the model on displaced children of the Rohingya community.

The research team has validated and implemented evaluative tools to test psychological distress (CORE 10), as well as a Child and Youth Resilience Measure (CYRM-12). With regard to CYRM-12, the tool has completed its evaluation of adolescents, and evaluative studies will soon be conducted on children. As for socio-emotional development, the project is using the Ages and Stages Questionnaires ASQ-3 and ASQ: SE on an ongoing basis. A playfulness scale is also being used to assess the playfulness level of children, and the Fidelity Tool (a Play Lab observation checklist) is being used to assess the quality of the outreach workers.

Currently, the research and monitoring team is taking steps to validate and implement the WIPPSI (Wechsler Preschool and Primary Scale of Intelligence), KAP (Knowledge, Attitude and Practices) and Bayley tools for impact evaluation on beneficiaries. It is clear, from initial positive results with the children involved in the HPL model, as well as from the increasing focus on the model by large-scale donor organisations, that the model has the potential to be contextualised and scaled in different humanitarian contexts.

'It was discovered that the community believed in collectivism, with practices, stories and rhymes being intergenerational.'

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Building cognitive capital, brightening China's future: piloting community-based early childhood programming

- ▶ *Urbanisation and internal migration are among challenges facing young children in rural China.*
- ▶ *Unicef and ACWF have successfully piloted a model of community early childhood centres.*
- ▶ *Two provinces have committed to scale-up the model, amid hope for a national roll-out.*

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In recent years the Government of China has made significant political and financial commitments to preparing 3–6 year olds for school, especially in rural areas. However, less attention has been paid to enhancing and expanding early stimulation, care and support programmes for children under 3. Recent research has found that around 6.6 million Chinese children aged 3 and 4 years have low cognitive and/or socio-emotional development, suggesting a clear failure in providing appropriate early childhood care and stimulation from a very early age (McCoy et al., 2016).

In rural and remote areas, few services exist for children from birth to age 3 beyond primary healthcare centres. In urban areas, private early childhood centres are often beyond the financial reach of poor or migrant populations. Such centres tend to have limited age-appropriate materials for early care and stimulation, and poorly qualified caregivers with little training or understanding about child development. There are no approved standards or policy guidelines for early childhood services.

Rapid urbanisation, industrialisation and massive internal migration continue to pose challenges to the survival, development and protection of vulnerable and disadvantaged children, including children left behind with extended family by parents who migrate for work, children who have migrated with their parents to cities, and ethnic minority children living in rural western provinces. These challenges are compounded by a lack of guidance and information for parents and other caregivers on the importance of socio-emotional development and 'soft skills' for later success in education, rather than a narrow focus on counting and reading characters from a very early age.

The pilot programme

Since 2013, Unicef, in partnership with the All China Women's Federation (ACWF), has piloted a community-based programme for vulnerable children aged up to 3 years in 146 villages or communities in six provinces in China: Hunan, Hubei, Hebei, Xinjiang, Shanxi and Guizhou. As of December 2018, a total of 38,528 children and 46,063 caregivers have been reached and 304 community volunteers trained to provide services at the community early childhood development centres.

The goal of the pilot project is to demonstrate to governments a detailed working and costed model of integrated early childhood services, with a comprehensive policy framework that links different programmes with appropriate financial allocations. The programme focuses on strengthening parent–child interactions and nurturing care through:

- establishing national and provincial expert teams for community-based early childhood programming for children up to 3 years old, with preliminary working groups set up at local level for integrated services
- strengthening the knowledge and skills of women’s cadres and volunteers on early childhood development
- integrating and leveraging community resources to form a community-level integrated service model
- developing accessible information, tools and materials to support raising caregivers’ awareness of their children’s early development needs
- advocacy to promote the replication of the model.

Initially, the model focused on establishing a centre in a community-provided space where parents or caregivers – who are often grandparents, the parents having migrated for work – could attend with children. Trained volunteer educators from the local community, including one recruited to work full-time, open the centre for five days a week, providing a stimulating environment and materials for free play. The centres conduct group sessions for caregivers and children, and undertake parenting education sessions. They are linked to local health facilities, social welfare and child protection services, and can provide referral services for children with suspected development delays or families who need welfare assistance.

‘The centres are linked to local health facilities, social welfare and child protection services, and can provide referrals.’

Home visits are conducted by volunteers on a weekly basis to provide one-to-one services to families who need special support, and volunteers support the setting up of home-based play groups in nearby villages where there is no centre.

The pilot programme developed a set of materials and resources to assist with implementation: training packages for volunteers, teachers and managers; learning materials for a parenting portal and mobile app; learning and context-specific play materials, and reading materials for children; and practical tools and standard operating guidelines for centres and preschools to improve facilities and their physical environment.

Various capacity development initiatives were conducted to strengthen the management, coordination and delivery of integrated services for children from birth to age 3. The targeted trainees include volunteers at the early childhood centres, parents and caregivers, health and child welfare service providers, and community leaders in the pilot areas. Civil society organisations working with young children in the pilot counties were supported to develop their skills and knowledge on child development. The programme also addressed higher-level technical support personnel – such as resource developers, training facilitators and researchers – to ensure quality implementation and effective scaling-up and advocacy.

Results and lessons learned

An evaluation was conducted in 2016 in two of the pilot provinces, Shanxi and Guizhou, where ACWF implemented the programme jointly with the National Health and Family Planning Commission and the Ministry of Civil Affairs. A study of 80 villages found that the percentage of children under 3 with suspected developmental delays had almost halved between 2012 and 2016 – from nearly 37% to nearly 19% (Zhou et al., 2019).

In 2017, a separate review (Unicef, 2017) of 60 communities in three other pilot provinces – Hunan, Hubei and Hebei – showed that 93% of caregivers had increased communication about child rearing within the family, 91% felt happier since the project started, and 90% had increased the amount of time spent with their children. The review also found that the programme had improved workers' and volunteers' professional knowledge and attitudes.

The integrated approach of nurturing care interventions has been well received by parents in the communities and by local governments, as evidenced by willingness to collaborate on better integration of service delivery. In Hunan Province, the provincial Women's Federation, together with the departments of

Early childhood development centre in Aijia village, Hubei



education, health and nine other sectors, included the model in their Five-Year Action Plan (2016–2020), which explicitly requires the province to ‘explore the establishment of a family support model for 0-3 early childhood development’.

As reported by ACWF, as of December 2018 the provincial governments of Hunan and Hebei have committed to fully fund all the early childhood development centres established through the ACWF-Unicef project at the end of the funding cycle. The intention is to gradually extend this support to all communities in the coming years. This commitment also includes setting up provincial integrated expert teams who will provide regular on-site technical support. Based on the successful experience of this pilot, Unicef and its national partners have agreed to work jointly on building up a front-line early childhood workforce and scaling-up this model nationwide.

→ Find this article online at earlychildhoodmatters.online/2019-21

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Philanthropy and government working together for a child-friendly Shenzhen

- ▶ *Shenzhen's rapid development has overlooked children's needs – but this is changing.*
- ▶ *The city government has committed to turning Shenzhen into a child-friendly city.*
- ▶ *Shenzhen Women and Children's Development Foundation plays a 'bridge and hub' role.*

Wenfeng Huang

Secretary-General

Shenzhen Women and Children's Development Foundation, Shenzhen, China

Shenzhen has developed rapidly in the last four decades, from a small fishing village to an international metropolis with GDP totalling 2.25 trillion yuan (256 billion euros) and a population over 12.5 million. But, in the process, children's needs have been overlooked. The only spaces many children have to play in are on the edge of busy roads, in the shadow of high-rise buildings. The municipal government has now committed to improve the city for its youngest residents: in 2016 it formally proposed to make Shenzhen a child-friendly city.

Ambitions on social protection, child participation and development of urban spaces were outlined in Shenzhen's latest five-year plan – a local adaptation of the objectives outlined in China's national five-year plan. A provincial committee with a working group headed by the Deputy Mayor was put in charge of coordinating plans for creating a child-friendly city, and involving city departments such as Housing and Construction, the Environment, Planning and Land Resources, and Traffic and Transportation. The committee issued the Shenzhen Children-Friendly City Strategic Plan (2018–2035) and Shenzhen Child-Friendly City Action Plan (2018–2020), the first such local programmatic documents in China.

In consultation with specialists, the Shenzhen city government developed guidelines and standards for child-friendly hospitals, libraries, parks, schools, etc., to address children's needs in areas such as education, leisure, nature and the environment.

Shenzhen is building 200 km of walking trails and improving its cycling system to create a pedestrian-friendly, cycling-friendly transportation environment. Shenzhen has built 265 km of subway lines, and tickets for young children are free or half-price. Its bus fleet is now 100% electric, contributing to improving air quality, a particularly important issue for very young children.

The city government has recognised the need to involve the private sector, non-governmental organisations and citizens in its efforts to make the city more child-friendly. At the Shenzhen Women and Children's Development Foundation, we have a two-track strategy to our involvement. First, a top-down approach – we are helping the government to promote its initiatives and develop policy papers. Second, a bottom-up approach – we are working with the government and other partners to carry out innovative pilot projects.

Promoting breastfeeding facilities

One example relevant to the very youngest residents of Shenzhen is our involvement since 2016 in work to encourage the provision of breastfeeding facilities and increase rates of breastfeeding. This has included gathering data from citizens about what facilities already existed, and constructing demonstration mother-and-baby rooms in a wide variety of public places, to show that breastfeeding should be possible anywhere – from shopping malls to metro stations, from parks to hospitals.

We held a series of competitions to engage the public in submitting design ideas for mother-and-baby rooms and for breastfeeding covers – shawls that mothers can choose to wear when they want to breastfeed and are not near a facility offering privacy. In parallel, we are conducting communications campaigns to increase the acceptability of breastfeeding in public places.



Photo: Courtesy of Shenzhen Women and Children's Development Foundation

With the joint efforts of academics and our foundation, the city government has published construction guidelines and standards for mother-and-baby rooms, and has offered supervision and training for personnel in charge of them. We successfully advocated for breastfeeding facilities to be included in public policies related to making Shenzhen more child-friendly. In December 2018, working with the government, we launched an app through which families can find their nearest breastfeeding-friendly facility.

Dozens of private sector and social organisations have joined this work. At the time of writing, there are over 460 mother-and-baby rooms across Shenzhen, and the government has committed to increase the number to a thousand by 2020. Promotion of breastfeeding is part of our wider push to raise awareness of healthy feeding practices and early childhood development, with other activities including distribution of bags with reading materials for toddlers.

Early childhood education and play

‘The city government has published construction guidelines and standards for mother-and-baby rooms, and training for personnel.’

The Shenzhen government is committed to tackling the shortage of resources and equalising early childhood educational opportunities for all children by investing in the construction and upgrading of inclusive kindergartens, encouraging more college students to major in preschool education, and developing dietary management and nutrition standards for kindergartens.

At present, there are 1771 kindergartens in Shenzhen. The number of enrolled children has reached 524,200, ranking first in China. To assure equal access to public education for children with disabilities, Shenzhen has been improving the number of special education schools and classes, forming teams of special teachers to develop integrated education, and increasing the enrolment rate of children with disabilities.

A child-friendly city includes creating opportunities for play and interaction. Together with the Shekou Community Foundation, and after coordination with various traffic departments, we held a ‘car-free day’ activity in Shekou, an area of Shenzhen. In September 2018, a major thoroughfare was closed to traffic and activities were held including street carnivals, creative bazaars and street gardens.

Shenzhen is known for being ‘the city of thousands of gardens’, with a forest coverage rate of 41.2% and parks where families can get close to nature – which is greatly beneficial to the early development of children. All municipal parks are open to the public free of charge and some have separate play spaces for children of different age groups: 0–3, 3–6, 6–12 and 12–18. The Action Plan provides special funds for natural education and training, and regular ‘outdoor nature practice’ courses in primary and secondary schools. Shenzhen has built nearly 20 natural education bases, and the number is expected to reach 100 in the next two years.

A model for other cities

Creating child-friendly cities is a recent initiative in China. The experience in Shenzhen has already generated valuable knowledge and practices, and shown how civil society can play an important role in advocating with local government, raising public awareness, implementing policies, and so on. However, every city is different and tools will need to be adapted accordingly through a participatory approach also involving academia, the private sector, and families and children themselves.

We see the Shenzhen Women and Children's Development Foundation playing the role of both a bridge and a hub. In terms of bridging, we are facilitating communication and exchange between the Shenzhen city government's child-friendly city working group and international initiatives; in our role as a hub, we have been conducting research locally to develop indicators on child-friendliness which government agencies and social organisations can use as a reference. We anticipate being able to learn from our experiences in Shenzhen and provide support to other cities in future.

➔ Find this article online at earlychildhoodmatters.online/2019-22

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The Urban95 Challenge: crowdsourcing ideas to improve city livability for caregivers and kids

- ▶ *Urban95 Challenge resulted in 26 small-scale ideas being funded in 18 countries.*
- ▶ *Potentially replicable ideas include Tirana's appointment of a Chief Child Development Officer.*
- ▶ *Nine of the ideas were included in the Foundation's draft Urban95 Starter Kit.*

Ardan Kockelkoren
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Urban95 is the Bernard van Leer Foundation's groundbreaking initiative to focus the attention of urban leaders, designers and planners on the needs of infants, toddlers and their caregivers. As they have historically been so often overlooked in urban planning and design, there is a shortage of ideas for practical, small-scale projects to improve the livability of cities from their perspective. In 2016, we launched the Urban95 Challenge to gather those ideas.

We suggested that the proposed projects could touch on aspects of city planning such as green public space, mobility for families and data-driven decision making – but the key requirement was that they address the core aim of Urban95: encourage thinking about how city life is experienced from an elevation of 95 cm, the average height of a healthy 3 year old. We received 151 ideas from 41 countries, and funded 26 of them, with grants averaging around EUR 17,000.

The projects came from 18 countries (Albania, Argentina, Australia, Bangladesh, Belgium, Brazil, Colombia, Ecuador, Gabon, Greece, India, Indonesia, Italy, Kenya, Mexico, the Netherlands, Turkey, and Vietnam) and addressed a range of issues including public space, data collection, community engagement, temporary street closures, traffic accidents, play design, correlation research, informal childcare, and air and noise pollution.

Our main aim with the Urban95 Challenge was to stimulate new ideas from a wide range of sources – the selected projects came from academic institutes, municipalities, established NGOs, and also many bottom-up community groups – and to get a sense of what might be scaled or replicated elsewhere. Around half of the projects have now concluded and the others are well underway, making it possible to reflect on what we have learned.

Three selected examples

Many of the projects show some potential to be replicated in other contexts. The latest status of all 26 can be explored on the Urban95 Challenge pages of the Foundation's website.¹ The three presented briefly here are chosen to illustrate the range of approaches.

¹ More about the Urban95 Challenge can be found at <https://bernardvanleer.org/urban95-challenge/>

In a *favela* in **Santos**, a coastal Brazilian city south of São Paulo, Instituto Elos adapted their 'Oasis Game' methodology to involve the community in thinking about how public space could be made more family-friendly, and in working together to put plans into effect. The response was enthusiastic, with 350 local residents helping to clear litter, paint murals, create a space for play, plant a vegetable garden, and turn an abandoned shipping container into a toy library.

One helpful insight from this project was the important role played by older siblings: parents were often too time-pressed to participate, as they struggle to balance childcare with earning money, but many older children appreciated how the project could help their parents and younger siblings and took responsibility for representing their family.

The municipal government of **Tirana**, Albania, created a new position to assess and advise the mayor on the impact of policies across the city administration on families with young children. A challenge for any city that aims to become more family-friendly is that every municipal department – from health to public transport, to social care, to parks and recreation – has some effect on urban livability for infants, toddlers and caregivers. Each city needs to find its own administrative solution for getting a holistic view that can inform policy.

Tirana's model of a Chief Child Development Officer is going well, and Mayor Erion Veliaj has become a champion for a children's perspective in the city. We have since funded additional activities to produce 'birth to age 5'-centric design guidelines and plans – currently being implemented across Tirana – to locate kindergartens and community centres on primary school campuses as part of a long-term strategy to upgrade the infrastructure of schools and integrate them into local neighbourhoods.

Based in **Rotterdam**, Netherlands, STIPO is an urban development and placemaking organisation that produces *The City At Eye Level* – an internationally recognised collection of resources, available in multiple languages, that explore how streets and other public spaces can be created or changed to work well at human scale. With our support, STIPO has developed a new publication, *The City at Eye Level for Kids*, which centralises the perspective of young children and their parents in this process.

Vivian Doumpa, Placemaker-Trainer at STIPO, says:

The project has been an eye-opener to our team on the importance and great potential for creating better and more equitable places for all through the inclusion and active participation of caregivers and young children. We feel like we have been given the opportunity to advance our work and impact as an agency further.

'Our aim was to stimulate new ideas from a wide range of sources and get a sense of what might be scaled or replicated.'

The Urban95 Starter Kit

The Urban95 Challenge informed our *Urban95 Starter Kit*, the first draft of which was published in 2018. The 90-page document provides a collection of 29 promising ideas that we have encountered in our Urban95 work so far. Nine of those ideas came from the Urban95 Challenge, with others suggested by our partners and network. The *Starter Kit* includes practical advice on implementing these ideas, which cover four categories – public space, mobility, early childhood services and data-driven management.

- 2 If you would like to receive updates on the availability of the second draft, and to stay abreast more generally of our thinking and knowledge on Urban95 – which continues to evolve quickly – we invite you to join our LinkedIn group at [linkedin.com/groups/13644197/](https://www.linkedin.com/groups/13644197/) or subscribe to our Urban95 newsletter at bernardvanleer.org/urban95-newsletter/.

We asked for feedback to inform the development of a second draft, and received 23 thoughtful responses from a range of experts in urban planning, policy or design, some working in governmental agencies, others in civic organisations, academia, foundations or architecture practices. As many of these ideas are new, users were keen for as much additional information as possible on practicalities such as costs and implementation processes, and templates for tools such as worksheets that can be adapted to local circumstances. The updated version is scheduled for publication in Summer 2019.²

→ Find this article online at earlychildhoodmatters.online/2019-23



Istanbul95: innovating with partners

- ▷ *Istanbul95 is aiming to improve life in Istanbul for young children and their caregivers.*
- ▷ *Innovative maps helped identify where vulnerable families face a shortage of services.*
- ▷ *Four partner municipalities are piloting a home visiting initiative and upgrading parks.*

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Nearly a quarter of a million babies were born in Istanbul during 2017. The city has over a million children aged up to 4. When we at the Bernard van Leer Foundation wanted to develop an Urban95 strategy for Istanbul – Urban95 is our programme to improve city life for young children and their caregivers – we asked ourselves and our partners: where should we start?

Based on our previous experiences, we decided to strengthen the capacities of district municipalities. They provide a wide range of social services, including food banks, cash transfers, daycare, parks and playgrounds. Health services are centrally administered. We needed to begin by improving our understanding of what services are available where, and in which neighbourhoods the need is greatest.

We contacted Kadir Has University's Istanbul Studies Centre (ISC) to ask: where are the most socioeconomically vulnerable young children in Istanbul? They prepared a map combining data on age group population per neighbourhood with data on property prices, as a proxy indicator for income. We asked the Turkish Economic and Social Studies Foundation (TESEV) to collate information from district municipalities about existing services and infrastructure, such as where daycare centres are located and how many children they look after, where parks are located, and what play equipment the parks have.

Most of the municipalities agreed to provide this data – and overlaying it with ISC's district maps enabled us to clearly identify the neighbourhoods where current services and infrastructure lag the furthest behind local needs. These maps became an innovative decision-making tool and generated significant interest, with representatives from 25 of Istanbul's 39 municipalities attending the launch event in 2017. They are available online, in both Turkish and English.¹

We developed partnerships with four district municipalities – Beyoğlu, Maltepe, Sarıyer and Sultanbeyli – to work on two pilot interventions: developing home visiting services to support parents, and improving green public spaces.

Developing low-cost parent support interventions

We asked Boğaziçi University for help in developing a simple, effective and low-cost parent support intervention. They formed a team of academics from the psychology, education and economics departments, and conducted focus groups with

1 Information on the Istanbul95 'Project for the analysis and mapping of services directed at children and their families in Istanbul's district municipalities' is available at: <http://belediye.istanbul95.org/en>

caregivers – mostly mothers – with young children. Together we decided to base our home visiting programme on the established Reach Up and Learn methodology.

The University of the West Indies, which developed the Reach Up curriculum, trained the team for 10 days. Based on what we learned from the focus groups, we added visits from the sixth month of pregnancy and information on nutrition and maternal depression. The team developed training material for home visitors and supervisors, manuals for toy making and a curriculum for 73 visits – with a visit every two weeks – focused on promoting more frequent and higher-quality caregiver–child interactions.

Each partner municipality sent at least three home visitors and one supervisor to be trained: we covered the costs of training and supervision, while the municipalities are covering the costs of the staff, who were either newly employed or recruited from departments such as welfare, daycare and social services. The municipalities used the maps as a starting point to identify families for the pilot, and for a control group. The target for the pilot phase was 120 families in each municipality – 480 in total – with one home visitor covering 40 families and visits lasting around 45 minutes.

‘We developed partnerships with four district municipalities to work on home visiting services and improving green public spaces.’

The academic team developed an evaluation framework using ASQ, a Turkish-language development test and mental health measurement for the caregivers. The evaluation will also project the economic difference the programme makes for families, and compare it against the cost of scaling up. We hired a field research company to collect data from the 480 families and another 480 in the control group, with data being collected during pregnancy and when the child is 9 and 18 months old.

Final results are not yet in – the pilot started in early 2018 – but the data collected at 9 months look promising, and anecdotal feedback has been very positive. One mother, for example, reported that she is looking into her newborn son’s eyes and talking to him while breastfeeding, which she did not do for her first two children. Home visitors and supervisors report feeling motivated by the transformations they are observing.

We are already working with municipal leaders on possible plans for scaling up, which they can integrate in their municipal strategic plans if the final evaluation is positive. In parallel, we have been working together on improving outdoor play spaces for young children and caregivers in the municipalities.

Green public spaces

Istanbul is a city of 15 million people, famous for traffic jams and air pollution, and needs more parks and public spaces for young children and caregivers. We agreed with partner municipalities that they would fund park improvements if we covered design-related costs. We contacted an architecture company, Superpool, and explained that we wanted to go further than just building

playgrounds, instead creating spaces that will help young children to develop and be inviting for caregivers to spend more time.

Superpool set out to learn about children's physical and cognitive development during the first three years, and compiled a range of simple ideas to respond to these needs. Working with Kadir Has University Arts and Design Faculty and StudioX of Columbia University, they organised study visits to Copenhagen and cities in the Netherlands where they and leaders from partner municipalities could observe some ideas in action.

Superpool has now developed designs for public spaces allocated by each of the municipalities, which are currently developing budgets and work plans.

The transforming power of young children

Istanbul95 has been highly motivating for our partners, with much enthusiasm for expanding the reach of the work. Kadir Has University, for example, has developed the first Masters of Arts programme dedicated to urban design for young children and caregivers. We have started to work with Bogaziçi University on a local adaptation of the Boston Basics campaign, with messages encouraging parents to play and interact with their children.

As a father of two young daughters, I have experienced on a personal level how focusing on children's development transforms your ways of thinking – how you learn as they grow, and constantly evolve your ideas about what you should be. It is exciting to see that the same thing can happen across a city.

→ Find this article online at earlychildhoodmatters.online/2019-24



Photo: Courtesy of Mekanda Adalet Derneği/Centre for Spatial Justice

Increasing the impact of early childhood programmes through behavioural science: initial prospects

- ▶ Behavioural science is based on insights about how humans are ‘predictably irrational’.
- ▶ Behavioural science should inform programmes to support positive parent–child interactions.
- ▶ The Foundation supports partners to incorporate proven behaviour change methodologies in their work.

Sam Sternin

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Across the various sectors that make up the early childhood development field – health, nutrition, education, psychosocial development, water and sanitation, child protection and beyond – there are many structural factors that impact the lives of young children and their caregivers: issues such as infrastructure, policies and laws, service availability and appropriate technology. However, one of the factors with the greatest impact is human behaviour – specifically the behaviour of young children’s caregivers and family members, service providers and community members. Across all of the sectors above, positive behaviours can put children on a path to healthy, productive development, while suboptimal behaviours can have serious ramifications.

Early childhood programmes often seek to influence or enhance behaviours to give children a better start in life. Behaviours promoted range from use of antenatal care to positive parenting practices, to improved nutrition, hygiene and exercise. Some programmes also seek to enhance the effectiveness of service providers, or address staff behaviours or practices which may discriminate against or otherwise create barriers for marginalised populations. Many focus on provision of information, based on the assumption that increasing awareness or knowledge of a topic will lead to changes in behaviour. This information is provided through a variety of channels including posters, pamphlets, books, television and radio spots, social media and interpersonal communications.

Unfortunately, lived experience and rigorous research have long indicated that human beings are not purely rational and that information alone is rarely sufficient to drive sustained behaviour change. To illustrate, many of us know doctors or nurses who smoke; people continue to use mobiles while driving, despite knowing the dangers; and we all know someone who has tried to diet or exercise regularly but who has failed to keep it up. None of these seemingly irrational behaviours is driven primarily by insufficient information on risks or benefits.

In response, different behaviour change methodologies have evolved to support the adoption of better behaviours. All start with the premise that humans are predictably irrational, and that empirical methods can allow us to identify and address the myriad non-rational barriers to improved behaviour. The following

typology can help distinguish between four complementary and sometimes overlapping schools of behavioural science:

- 1 **Social and behaviour change communications (SBCC).** Informed by communications science and marketing, a wide range of theories and models exist and are most commonly employed in the public health sector¹. These typically aim to influence knowledge, attitudes and social norms via rigorously tested and validated motivational messages transmitted through a variety of mutually reinforcing media channels.
- 2 **Participatory methodologies.** These models posit that those whose behaviours should change must be aware, proactive agents in the change process, not merely passive communications targets. Examples of participatory approaches include Participatory Action Research (PAR)² and Positive Deviance (PD)³. All harness the power of collective action and social norms to drive change at individual, family and community levels.
- 3 **Design methods** emerged from architecture, urban planning and industrial design. These were originally based on the observation that the physical layout and characteristics of spaces and objects influence users' behavioural patterns. In more recent years, 'human-centred design' (HCD)⁴ has expanded to include elements of SBCC and participatory methods.
- 4 **Behavioural economics** is a more recent discipline emerging from psychology and economics. Popularised by Thaler (2009) and Kahneman (2013) among others, it focuses on universal cognitive biases that shape human reasoning. Behavioural economists apply tools such as default options, reminders and other nudges to overcome or exploit cognitive biases to promote better behaviours.⁵

'Different behaviour change methodologies have evolved to support the adoption of better behaviours.'

In early 2018, the Bernard van Leer Foundation commissioned an assessment of the use of these different methods by its grantees and partners around the globe. The review, which included a document review and interviews, found that several partners were already using some of the methods described above. However, a number of essential practices – including analyses of behavioural barriers; demographic and psychographic segmentation; pre-testing of messages and interventions; and monitoring and evaluation of behaviour change interventions – were not systematically practised by the majority of the Foundation's partners.

Almost none employed more than one of the methods above, and many continued to invest major resources into providing information on 'good' and 'bad' behaviours. While there was strong anecdotal evidence for the positive behavioural effects of many of these programmes, they were largely unable to provide evidence-based answers about whose behaviour was changing (or not), why, and how activities or messages could be improved to deliver an even stronger and more sustainable behavioural impact.

The Foundation has now launched an initiative to build partners' capacity to better integrate behavioural science in their work. In partnership with Johns

1 For more detailed technical guidance and examples, see 'SBCC Online Learning' on the Health Communication Capacity Collaborative website.

2 For definitions of PAR and references, see Participatory Action Research & Organizational Change (online).

3 For a description, methodological tools, and global case studies, visit Positive Deviance Initiative (online).

4 IDEO.org (online) gives a description and additional resources.

5 For a list of cognitive biases and examples of interventions that address or harness them, see the flashcards at Center for Advanced Hindsight (online).



Hopkins University's Center for Communication Programs (CCP) and the Busara Center for Behavioural Economics, the Foundation organised workshops in autumn 2018 in Istanbul and Lima to explore the potential for behavioural methods to enhance partner impacts. Based on those discussions, in 2019 Busara and CCP will support the integration of behavioural science in a number of ongoing partner initiatives including but not limited to:

- improved pre- and postnatal healthcare practices among vulnerable populations in the Netherlands
- work with Urban95 partners in Peru, Colombia, and Israel to address behavioural barriers including violence, solid waste, and other issues that limit the use of public spaces by caregivers and children under 5
- promotion of positive nutrition and parenting practices in government- and non-governmental-led health and parenting education programmes in Côte d'Ivoire and Israel
- increasing the use of paternity leave and building positive fatherhood behaviours during that period with partners in the Netherlands and Brazil
- enhancing the effectiveness of behaviour change efforts in home visiting programmes in Peru and Brazil.

Across all programmes, strong emphasis will be placed on monitoring and evaluation to determine the effectiveness of these interventions, with initial results anticipated in the next 9–12 months. The initiative will invest in building partner capacity to reduce the need for external technical assistance in the medium term. Finally the Foundation will continue to explore how to expand these efforts with a greater number of grantees, partners, donors and initiatives in the early childhood development field.

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In this section, we present brief summaries of initiatives, publications or other resources which have come to our attention in the past year and which we believe deserve a wider audience.





Global impressions

Using cash transfers to boost early childhood development: training parents on child stimulation

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Using cash transfers to boost early childhood development: training parents on child stimulation

- ▶ *Linking cash transfers and parenting programmes can help build children's human capital.*
- ▶ *Income support can be combined with incentives to invest in children's development.*
- ▶ *A new report by the World Bank assesses the emerging evidence and models.*

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Poverty has a wide-ranging detrimental effect on child development and more broadly on human capital accumulation. The World Bank Group recently launched the Human Capital Project, recognising that investments in a child's earliest years are among the smartest a country can make to address extreme poverty, reduce inequality, boost shared prosperity and develop the human capital needed to grow and diversify its economy. The report *Promoting Early Childhood Development through Combining Cash Transfers and Parenting Programs* (Arriagada et al., 2018) examines the potential for bringing together cash transfer and parenting programmes targeted to the poorest and most vulnerable to improve children's human capital.

Cash transfer programmes are typically designed for poor families where child development deficits such as chronic malnutrition are concentrated. They also benefit from a rich legacy of focusing on behavioural practices, particularly concerning parents' investments in children. Pro-poor cash transfer programmes can help to mitigate the detrimental and long-lasting effects of poverty on child development, support human capital accumulation and reduce inequality from early in life. There is established evidence of their contributions in protecting and boosting children's health, nutrition, education and access to core services (Fernald et al., 2012; Bastagli et al., 2016; de Walque et al., 2017).

Beyond income support, cash transfer programmes often include 'accompanying measures' in the form of goods and services often aimed at instilling certain behaviours and investments among parents in order to improve children's human capital outcomes. Conditional cash transfers require or encourage parents to take their babies to health clinics for pre- and postnatal care, attend growth promotion sessions, and regularly send children to school. Increasingly, cash transfer programmes are directly providing complementary goods and services linked to early child development, as well as encouraging parents and caregivers to participate in parenting programmes and improve their own knowledge and practice.

Cash transfer and parenting programmes

Parents and caregivers are crucial to the healthy development of infants: investing in their children's nutrition and health, and ensuring a safe and

supportive home and access to key services. Parents actively shape children's skills and socio-emotional development by playing with them, talking, reading or telling stories to them and interactively responding to their cues.

In combination, cash transfers and accompanying measures designed to improve parenting practices can be a powerful tool to improve child development during the early years. Evidence from parenting interventions in developed and developing countries has shown in many cases positive impacts on parenting practices, home environments and child development outcomes. However, most of the evidence is from small-scale interventions delivered through home visits.

We find promising evidence for combining cash transfer and parenting programmes based on four scalable combined programmes in Colombia, Mexico, Niger and Peru. Adding the parenting programme to the cash transfer programme improved some parental practices and child development outcomes, with significant results in children's cognition, language and socio-emotional development. However, evidence is still scarce and often based on small trials, calling for more research to understand the key elements of optimal combinations, fidelity of implementation, cost-effectiveness of different design features, replicability and sustainability of results.

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The case for inclusive education

- ▷ Over 32 million children with disabilities are currently not attending school.
- ▷ Meeting the Sustainable Development Goals (SDGs) will require more investment in inclusive education.
- ▷ A new report makes the case for 'Leaving no one behind when learning starts'.

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Children like 5-year-old Abdou Nourou Sawadogo (pictured), who was born with cerebral palsy in a village in Burkina Faso, typically do not receive the kind of early childhood development services that would enable them to attend school, develop holistically and fulfil their potential. For children who are at risk or have disabilities, early childhood is the single most important life phase. Over 32 million school-age children with disabilities are believed to be out of school, mostly in developing countries. A child's disability status has a bigger impact on their chances of receiving an education than their gender or location.

In 2016, the report *#CostingEquity*, supported by the Open Society Foundations, made the case for governments and donors to urgently increase investment in disability-responsive education financing to achieve the Sustainable Development Goals (SDGs). There is strong evidence on what works in education for children with disabilities, but there has so far been insufficient investment in systemic change and building teachers' capacity. It would make a significant difference if disability inclusion were to be mandatory for accessing donor funds (International Disability and Development Consortium and Light for the World, 2016).

There are signs of progress. At the Global Disability Summit in 2018, the World Bank committed to make all education programmes disability-inclusive by 2025. They also agreed to host the Inclusive Education Initiative, which will provide technical support to governments and help to unlock funding, along with the United Kingdom's Department for International Development and the Norwegian Ministry of Foreign Affairs.

Building on the *#CostingEquity* campaign, in July 2019 Light for the World and the Open Society Foundations will launch a new advocacy research report and briefs to focus attention specifically on equitable financing in the early years. They will make the case that early childhood development interventions can help children from vulnerable groups and with disabilities to fulfil their potential by getting them into school and improving their learning outcomes, and prevent family separation and institutional placement.

The report, *Leaving No One Behind When Learning Starts*, will draw attention to how low are the current levels of investment in inclusive and equitable early childhood development, particularly among donors, and how far there is to go in scaling-up investment. Initial findings show that many donors are spending less than 1% of their overall development assistance on early childhood development.

In supporting the design of inclusive and equitable early childhood development programmes, the report is especially timely: this year's UN High Political Forum's theme is 'Empowering people and ensuring inclusiveness and equality', and SDG 4 is to be reviewed in depth.

The impact of failing children with disabilities is devastating, not just for tens of millions children and their families, but for whole economies. In Bangladesh, the World Bank estimates that USD 1.2 billion annually, or 1.74% of GDP of income, could be lost due to lack of schooling and employment for people with disabilities and their caregivers.

Nourou did not learn to walk or communicate until he and his mother started receiving support on early childhood development from a community-based rehabilitation worker two years ago. Nourou's mother now believes in her son's ability to learn and intends to enrol him in their local primary school. With greater investment in inclusive early childhood development while generating more evidence, many more children around the world could get the same opportunities.

➔ Find this article online at earlychildhoodmatters.online/2019-27

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Abdou Nourou Sawadogo, 5 years old, from Burkina Faso



Photo: Courtesy of Light for the World

- ▷ New WHO publication sets out air pollution's effects on children's health and survival.
- ▷ Low birthweight, impaired neurodevelopment and chronic lung disease are among the risks.
- ▷ Health professionals should raise awareness about air pollution and advocate policy solutions.





Air pollution and child health: prescribing clean air

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Air pollution is receiving more attention as a major environmental health threat, but one critical aspect is often overlooked: how it affects children in uniquely damaging ways, with devastating effects on their health and survival. Globally, 93% of children live in environments with air pollution levels above the World Health Organization's (WHO) guidelines (WHO, 2018a). In 2016 almost 600,000 children under the age of 15 died from the joint effects of household and ambient (outdoor) air pollution (WHO, 2018b; in press).

WHO's new publication *Air Pollution and Child Health: Prescribing Clean Air* summarises the latest evidence on the links between exposure to air pollution and adverse health effects in children. The report also highlights the necessary actions that international and national governments, communities and businesses across different sectors can take to reduce harmful exposures to air pollution (WHO, 2018a).

The links between air pollution and adverse health outcomes in children are becoming clearer. Studies have shown associations between exposure to ambient air pollution during pregnancy and adverse birth outcomes, including low birthweight, preterm birth, infants born small for gestational age and stillbirth. Research also suggests links between exposure to air pollution and infant mortality, impaired neurodevelopment, increased risk of childhood cancers (in particular leukaemia), exacerbation of childhood asthma and impeded lung growth and function.

There is compelling evidence that childhood exposure to air pollution is a significant risk in the development of respiratory infections, including pneumonia (Perera, 2017) and tuberculosis (Hwang et al., 2014). In 2016, the joint effects of household air pollution from cooking and ambient air pollution caused more than 50% of acute lower respiratory infections in children less than 5 years of age in low- and middle-income countries (WHO, 2018a).

Children who are exposed to air pollution are more likely to develop chronic illnesses later in life (Kassebaum et al., 2016). There is evidence that prenatal and childhood exposure to air pollution can predispose individuals to chronic lung and cardiovascular disease in adulthood. Poor lung growth and low peak lung function in early adulthood causes about half of all cases of chronic obstructive pulmonary disease (Sly and Bush, 2016).

All this evidence suggests that the best time to invest in a child's health is the early years, starting in pregnancy. Precisely because children are one of the groups most vulnerable to environmental exposures, actions taken during this critical period can yield immense health benefits well into adulthood. Research suggests that actions taken to reduce childhood exposure to air pollution can reduce chronic illness later in life, decreasing the burden on public health systems and allowing individuals to participate fully in society.

Health professionals play an important role in reducing harmful childhood exposure to air pollution. As trusted sources of information, they are uniquely positioned to advocate solutions to other sectors and policymakers, and to educate colleagues and students about the dangers of air pollution. Robust and clear evidence is essential to inform local, national and international communities about the health effects of air pollution and to motivate action that can improve air quality.

'The publication summarises evidence on the links between exposure to air pollution and adverse health effects in children.'

Individual actions alone are not sufficient to reduce the global burden of air pollution. Approaches to preventing exposure must be complementary and mutually reinforcing: everyone, from individuals to health professionals, local and national governments, community leaders and the private sector, has a role in raising awareness of the adverse health effects of air pollution, reducing air pollution, and protecting the health of children now and in the future.

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NOTE

This article was reviewed by Professor Peter D. Sly, WHO Collaborating Centre for Children's Health and Environment, University of Queensland, Australia. The authors are staff members of the World Health Organization. The authors alone are responsible for the views expressed in this article and they do not necessarily represent the decisions, policy or views of the World Health Organization.

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The effects of transportation on early childhood development

- ▶ *Urban transport can be stressful and time-consuming for caregivers with young children.*
- ▶ *Caregivers tend to use public transport for multi-stop journeys at off-peak times.*
- ▶ *Cities should try to locate services for young children within easy walking distance.*

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Urban transportation can affect the quality of the experiences that shape the developing brain – for good and for bad. It affects the extent to which pregnant women, babies and toddlers can access the services they need for healthy development: sources of healthy food, well baby clinics and other primary healthcare, childcare, parks, and play spaces. It can cause stress for caregivers. It affects the quality and amount of responsive care they can provide. It can pollute the air.

We encourage cities to prioritise the health of their youngest residents by considering the following:

1 15-minute (or less) neighbourhoods for babies²

Shortening distances to key early childhood services is one of the best things a city can do for the healthy development of its babies and toddlers.

2 Plan for the types of journeys made by caregivers, especially women

Caregivers have different travel patterns from daily home-to-work commuters. Their journeys tend to involve many stops and often take place at off-peak times. Measures that accommodate the needs of caregivers travelling with small children could include: universal transit cards or time-based systems that allow passengers to transfer without needing to pay again; predictable schedules that make it easier to plan multi-leg journeys and reduce waiting times; and measures to make public transport and pavements safer from harassment and violence, as well as more accessible for pushchairs or people juggling packages and children.

3 Prioritise the routes and destinations most important to babies, toddlers and caregivers

It's overwhelming to think of improving every street and pavement in a city.

4 Design child-friendly streets

For babies and toddlers, safer roads mean both traffic safety and reducing air pollution. As described in the next article, the Global Designing Cities Initiative is working on a 'Streets for Kids' supplement to its Global Street Design Guide (2016), which provides technical guidance on designing streets that serve both as safer transport corridors and spaces for vibrant public life.

¹ This article has been abstracted from the December 2018 issue of *Sustainable Transport*, the magazine of the Institute for Transportation and Development Policy. It is available in full at: <https://www.itdp.org/2019/02/11/transport-childhood-development/>

² In the original article, the ambition is stated as 20 minutes. Subsequent research suggests 15 minutes is preferable.

5 Create walkable cities

Not only is walking good exercise and free – it is predictable, reducing stress on already stressed caregivers. And, at its best, walking through city streets creates a stream of interesting sights, sounds and people for small children to experience.

6 Make travel fun

City dwellers can spend hours a day in transit. One recent project to turn travel into moments for learning and love is in São Paulo, Brazil, where billboard messages have been posted to encourage caregivers to talk, sing, and play with their small children.

7 Regulate cars in places where small children spend the most time

Cities around the world are banning cars in city centres. We'd like to see this near places where babies and toddlers spend the most time, such as play streets near schools and in neighbourhoods filled with families.

➔ Find this article online at earlychildhoodmatters.online/2019-29

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Photo: Vanessa Touzard/Bernard van Leer Foundation

Designing streets for kids: possibilities for children in the built environment

- ▶ Cities need to design streets from the perspective of children and their caregivers.
- ▶ From benches to trees, lighting to signage, the smallest details of street design matter.
- ▶ The guidebook *Designing Streets for Kids* will highlight practical strategies.

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Cities around the world offer great examples, large and small, of streets that allow kids to be healthy, safe, and comfortable. The forthcoming design guidebook *Designing Streets for Kids*, to be published by NACTO in late 2019, will highlight practical strategies to help implement positive changes in cities, as well as examples from around the world.

At the largest scale, planning and zoning codes determine how we distribute different land uses, where we place key destinations, and urban density. Investment in transport systems affects access to quality education, public open space and healthcare services. The speed of traffic and the amount of space prioritised for people dictate whether a child or caregiver feels safe cycling to daycare, walking to school or taking public transport during rush hour.

And the smallest details matter. The design of buildings, where we place building entrances and windows, and where we plant trees all shape our experience. This experience can play a crucial role in making the choice of whether to move on foot or by car. Frequent entrances and windows, for example, create a sense of security by adding 'eyes on the street'. Trees provide protection from the heat. Well-placed lighting ensures that streets feel safe at all hours of the day. Architectural details such as awnings and small recesses provide spaces for children and caregivers to pause, to grab a snack, or to embrace a momentary meltdown.

The presence and slope of a kerb ramp allow a person with a pushchair or an assisted mobility device to access a safe pavement. A clear path on a pavement – with a width of 2.4 metres (absolute minimum 1.8 m) – allows a continuous and safe journey for families to walk next to each other, and a pause space on a pavement with a thoughtful bench placement determines if parents are able to comfortably feed or breastfeed in the shade, potentially extending the time they are able to leave the house with a baby.

Infrastructure and mobility choices accommodating needs for multiple stops in a single journey can have wide-reaching impacts. Dedicated transit lanes painted on larger streets means a more reliable bus service, so parents or caregivers can drop their children at daycare and still reach their jobs on time. Bike share programmes with kids' seats allow a family to explore a new neighbourhood or accept a social invitation that may have been otherwise too

far away, encouraging both physical and social well-being. Proper drainage details ensure that standing water will not be a breeding ground for waterborne diseases.

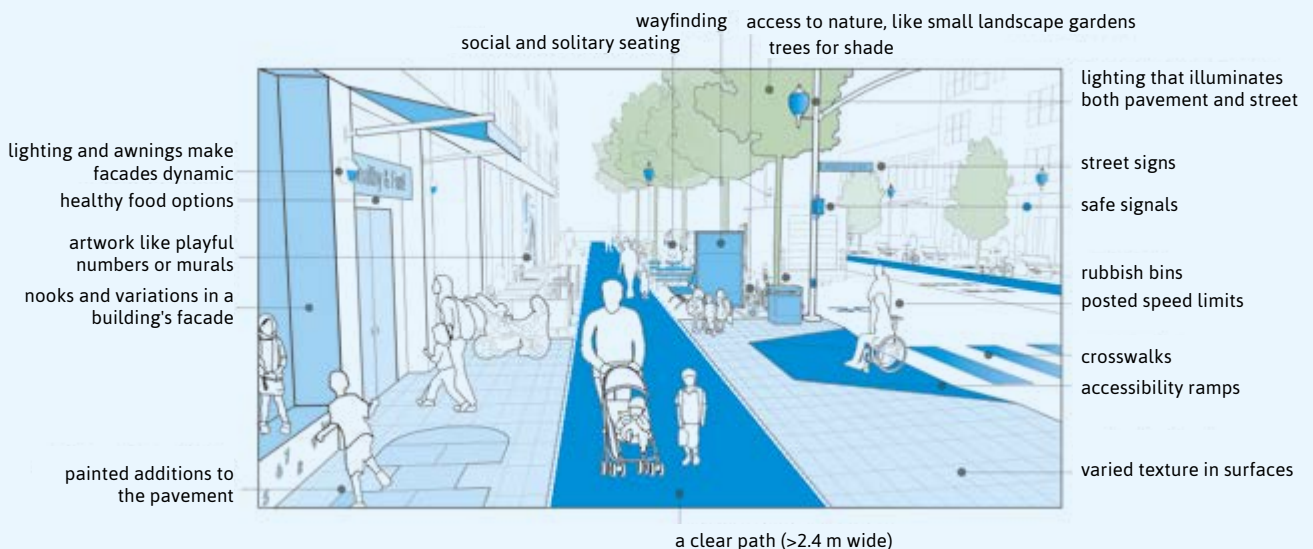
Studies show that the built environment affects development and cognitive abilities, and can bring joy to its youngest users and their caregivers. A transport stop that includes artwork and games encourages children's critical thinking skills while filling waiting times with fun distraction. Herbs planted beneath street trees spark their sense of smell, and proper maintenance ensures that a grandparent feels comfortable allowing a child to interact with plants and nature on a neighbourhood walk.

While overall continuous surfaces are particularly important in ensuring accessibility for people walking and cycling, small details in paving patterns, markings, or textures within the footpath can add playful opportunities for young kids to learn and explore within their daily walking journeys. Clear wayfinding signage helps people to make decisions about their journeys by informing them how long it will take to walk, cycle or take transport to various destinations.

In short, we need to re-focus on people – especially children – in our urban streets, inspiring leaders, informing practitioners and empowering communities. Streets might look and feel different from one corner of the globe to the next, but the principle of designing streets from the perspective of a child is universal.

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Simple design details can greatly improve how children and caregivers experience a street



Drone photography improves understanding of spaces for children in Lima

- ▷ GRADE has developed ways to assess access to, use and quality of public spaces in Lima.
- ▷ Drone photography is an innovative way to assess use and maintenance of public spaces.
- ▷ Many public spaces in areas of Lima with high rates of poverty are not suitable for children.

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GRADE, with the support of the Bernard van Leer Foundation, has been working on the development of indicators and instruments related to access to, use and quality of public spaces in Metropolitan Lima, mainly in districts with high rates of poverty and urban violence.

The objective is to provide local and central governments with tools that will enable them to monitor and improve public spaces. These tools include indicators – such as the quality of the environment, ease of access for pedestrians, and level of use by families – and instruments for assessing them, such as checklists and drone photography. The use of drone photography is particularly innovative in assessing the state of public spaces.

During the first phase of the project, in 2018, we conducted a pilot study in the district of San Juan de Miraflores, located in southern Lima. We developed and administered an observation guide in the district's parks, and took photos with drones. We found that the parks:

- were mostly not protected by any security features
- had either no playground facilities at all, or only basic playground facilities that did not encourage creative play
- were hard to access because footpaths are inadequate and the surrounding areas are polluted by garbage
- had been poorly maintained by the local government, and
- were not commonly used by children.

Currently we are fine-tuning the instruments and indicators, and validating them by applying them in other settings – the districts of Comas and Carabayllo, located in northern Lima, which are also characterised by high rates of poverty and urban violence. Preliminary analyses show the issues are similar.

We hope that local governments will be able to use the resulting statistical information to improve the public spaces they administer, and the National Institute of Statistics and Informatics (INEI) of Peru will be able to incorporate the instruments and indicators into the national statistical system.

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Photo: Courtesy of GRADE



Photo: Courtesy of GRADE

GET INSPIRED

New and scalable ideas to support babies, toddlers and the people who care for them



Early Childhood Matters is the Bernard van Leer Foundation's annual round-up of the most important advances, innovations and good practices in global early childhood.

It's for the policymakers, practitioners, researchers and funders working to inspire and inform action to improve the health and well-being of young children and their caregivers.

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