Early Childhood Matters

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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Celebrating 20 years of Early Childhood Matters

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Towards nurturing care: advancing early childhood development in 2018

Joan Lombardi

Senior Advisor, Bernard van Leer Foundation

The launch of the Nurturing Care Framework at the World Health Assembly in May represents a critically important step in the continuing efforts to shine a spotlight on the needs of young children and families. Simply put, the call for nurturing care underscores the fact that young children need responsive caregiving, good health and nutrition, safety and security, and opportunities for early learning. The core elements of nurturing care build on what we have known for years about the nature of child development: that physical, social, emotional and cognitive development are integrated and indivisible, one domain of development influencing the other.

This year also marks the 20th anniversary of the first issue of *Early Childhood Matters.* In 1998, after publishing more than 80 editions of an in-house newsletter addressed solely to Foundation projects and staff, the Bernard van Leer Foundation published a more outwardly facing publication addressed primarily to the practitioners in the field of early childhood development (Van Gendt, 1998: 3–4).

Since the publication of that first issue, there have been significant advances in both our understanding of the science of child development and the importance of investing in the early years. While we now have much more information on 'why' early childhood matters, we are still seeking answers to the 'how'. How can we assure 'effective' services and policies? – a theme that was discussed some two decades ago.

The key elements of good programming that were included in the very first article of *Early Childhood Matters*, by Judith Evans (1998: 8–11), have stood the test of time. In her article 'Effectiveness: the state of the art' she listed key principles to achieve maximum benefits. These included, among others: building on what exists, being flexible, developing programmes with families and with an understanding of the wider community, reflecting diversity, providing equity in access, assuring quality, and being cost-effective. Moreover, the article pointed out that effectiveness calls for a multidimensional approach that combines health, nutrition, education, and social actions. This same comprehensive strategy has been the hallmark of good programming from the establishment of Head Start in the 1960s to the recent launch of the Nurturing Care Framework. Now we have to move to bring these concepts to scale, particularly for the youngest children around the world.

Faced with this challenge, we focus this issue on the voices of leadership standing up for young children and families; highlight examples from countries around the world which are moving to scale services; include innovations and breakthrough solutions; and provide snapshots of some of the current issues that still must be addressed.

Leadership

As we have said in the past, moving to scale does not just happen, it takes strong and decisive leadership. We are honoured to launch the 2018 issue of *Early Childhood Matters* with the views from great champions for young children.

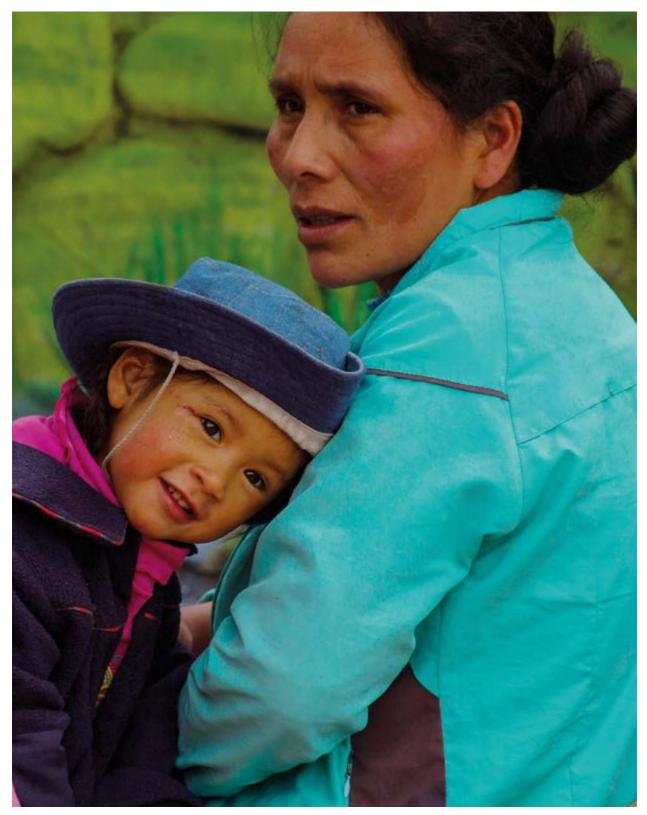
The issue opens with an article by Juan Manuel Santos Calderón, President of Colombia and 2016 Nobel Peace Prize Laureate, whose commitment to young children and families is reflected in the groundbreaking initiative 'De Cero a Siempre'. This initiative is a prime example of how a country can promote coordination and scale-up services throughout the early years. We then move to the Director-General of the World Health Organization, Tedros Adhanom Ghebreyesus, a critically important voice for young children. Dr Tedros reflects on nurturing care as a core element to improve child health and development. He reminds us of the rationale behind this focus on holistic development when he says: 'children need nurturing care for their innate capacities to flourish' (page 17).

We complete this set of articles on leadership with two pressing and related issues: the humanitarian crisis facing children living in conflict, and the importance of violence prevention in the early years. David Miliband, President and CEO of the International Rescue Committee, and his colleagues from the IRC, Sarah Smith and Katie Murphy, provide insight into the tragedy unfolding around the world as children and families suffer from war and forced migration, and call for stepped-up efforts to address their needs as a key part of humanitarian response (pages 21–6). Marta Santos Pais, United Nations Special Representative of the Secretary-General on Violence against Children, underscores the necessity of nurturing care in the early years and the critical role of violence prevention (pages 27–31). Together these two articles remind us all of the links we must make between early childhood services and child protection. Keeping children safe and secure must start with the youngest children around the world.

Scaling

Leadership leads to scaling. We begin this section with three articles that paint a picture of scaling efforts going on around the world. First we hear from Halim Antonio Girade who discusses 'Criança Feliz', the landmark effort to scale home visiting programmes in Brazil (pages 34–8). From there we move to

'Simply put, the call for nurturing care underscores the fact that young children need responsive caregiving, good health and nutrition, safety and security, and opportunities for early learning.'



△ Photo: Vanessa Touzard/Bernard van Leer Foundation

Bhutan, as Karma Gayleg describes efforts to blend child well-being and Gross National Happiness to promote holistic early childhood services with a focus on parenting (pages 39–42). Moving to Africa, Katelin Gray, Matthew Frey and Debjeet Sen discuss PATH's work to scale services that integrate nutrition and responsive parenting (pages 43–7). All three of these articles reflect important efforts to promote nutruring care.

Moving back to Latin America, Cecilia Vaca Jones and Leonardo Yánez highlight the potential of the Nurturing Care Framework for the region (pages 48–50). They remind us of the history and advances in Latin America as they underscore the significance of the current moment.

Along with these examples from a range of countries and different regions, we include four articles that reinforce the importance of both promoting new champions and building key elements of infrastructure so essential to effective implementation at scale. We start with Nana Taona Kuo (pages 51–3), highlighting *Every Women Every Child*, a key mechanism for championing issues facing young children and families and their link to sustainable development. Turning then to research, Kate Milner, Pia Britto, Tarun Dua, Karlee Silver and Joy E. Lawn share the main lessons from Saving Brains to inform the policy process (pages 54–8). We conclude this section with two related needs: for a well-supported workforce and continued financing. Michelle Neuman and Mark Roland share lessons learned about the early childhood workforce from scale-up in Peru, South Africa and the Ukraine (pages 59–64). Christin McConnell provides insight into the emerging role of the Global Partnership for Education in promoting increased investments in the early years (pages 65–7).

Innovation

One of the most exciting aspects of the early childhood field today is not just witnessing efforts to scale services, but the continued focus on innovation and attempts to find breakthrough solutions. We include seven articles that illustrate the range of innovations emerging around the world to address both the changing conditions facing children and their ongoing needs. New ideas are particularly crucial in cases where there are pressing issues and new challenges facing families, and where the responses to those issues are just beginning to gain attention.

We highlight innovations in three such areas: supporting refugee and displaced families, supporting families with children with disabilities, and training for health workers to address maternal depression. Ghassan Issa, Lara Aoudeh, Cosette Maalouf and Youssef Hajjar describe a noteworthy model, the Health, Early Learning and Protection Parenting Programme (HEPPP), which is being implemented for refugees, internally displaced and marginalised host communities in the Arab region (pages 70–3). Erica Salomone, Brian Reichow,

'Moving to scale does not just happen, it takes strong and decisive leadership.' Laura Pacione, Stephanie Shire, Andy Shih and Chiara Servili describe a new training package to support caregivers of children with disabilities (pages 74–7). And Shamsa Zafar highlights the work in Pakistan to train health workers to address maternal depression at scale using technology (pages 78–80).

We then turn to a new trend that we see emerging across the world as the focus moves from single programmes to an approach focusing on young children and families across multiple programmes in a community. Chris Cuthbert highlights A Better Start (ABS), a ten-year investment by the National Lottery into five economically disadvantaged communities in England (pages 81–4). Next we move on to Patrin Watanatada's description of Urban95, the groundbreaking Bernard van Leer Foundation initiative to put a focus on the needs of children under age 3 as part of urban planning across a number of cities around the world (pages 85-9). Daniella Ben-Attar provides an illustration of such a planning process which is taking place in Tel Aviv (pages 90–3). This section closes with an article by Jaap Seidell and Jutka Halberstadt (pages 94–6), who remind us of the importance of early nutrition. An example of Amsterdam's efforts to address this critical issue is highlighted separately after the article (pages 97–9).

Short takes on current issues

In this final section, we address other pressing issues currently facing young children and families. These include the increasing challenge of pollution and its effects on child development, outlined by Philip J. Landrigan (pages 102–4), and the critical imperative of clean water, sanitation and hygiene, highlighted by Amy Keegan (pages 105–7).

Next up are two significant efforts to focus on childcare for working families around the world, a topic that needs much more attention. Carmen Niethammer and Roshika Singh talk about 'moving the needle' on employer-supported childcare (pages 108–9) and Rachel Moussié highlights the work of Women in Informal Employment: Globalizing and Organizing (WIEGO). This important organisation focuses on securing livelihoods for the working poor, especially women in the informal economy. Her article shines a spotlight on the childcare needs of this major segment of the workforce (pages 110–11).

Turning towards the issue of assessment, which continues to be discussed in the field, Sara Poehlman, Amy Jo Dowd and Lauren Pisani describe IDELA, one instrument being used to change policy and practice (pages 112–14). The last article moves us into the future. Sonja Giese describes the Think Future Conference and the efforts of Innovation Edge to break new ground and move us towards the next phase of innovation (pages 115–16).

As we conclude this issue of *Early Childhood Matters*, reflecting back over the past 20 years since the first was published in 1998, we see both progress and

'One of the most exciting aspects of the early childhood field today is not just witnessing efforts to scale services, but the continued focus on innovation and attempts to find breakthrough solutions.' challenges. If we look across the world we see a tapestry of support emerging for young children and families. Yet there is so much more to do to make sure all young children grow up with nurturing care and an environment of support for their families. While the challenges ahead remain daunting, hope is in the air.

References

Evans, J.L. (1998). Effectiveness: the state of the art. *Early Childhood Matters* 88 (February): 8-11.

Van Gendt, R. (1998). Introducing Early Childhood Matters. Early Childhood Matters 88 (February): 3–4.

LEADERSHIP

'De Cero a Siempre', a commitment to our children's early years

Juan Manuel Santos Calderón

President of Colombia and 2016 Nobel Peace Prize Laureate Investing in early childhood is the best commitment a country can make both in its present and in its future. Based on this premise, in Colombia we designed a comprehensive policy – known as 'De Cero a Siempre' (From Zero to Forever) – with the aim of achieving an egalitarian society in which disadvantaged circumstances at birth are not perpetuated throughout our citizens' lives.

Our children are at the very heart of the peaceful Colombia we are now building, so we understand the urgency of designing a visionary early childhood policy that is in keeping with the international agenda on this same issue.

Evidence shows that the brain develops at its most rapid pace in the first five years of life, and that investment in this sector of the population brings the greatest rates of social return. Based on this evidence, and putting the safeguarding of children's rights at the top of our agenda, we decided to create a programme of comprehensive care that could be adjusted to suit the particular circumstances wherever children were living across the country. We also invited the private sector, social and community organisations, academia and international cooperation bodies to join the project.

This challenge required an innovative approach to the way we designed, managed, implemented and invested in effective public policy. Seven years after implementation, and thanks to an unprecedented increase in investment in early childhood, Colombia has managed to significantly expand the coverage of integrated care for this population. This has enabled us to go from providing care for 400,000 children in 2010 to the current figure of more than 1.2 million children, close to 50% of whom are living in vulnerable circumstances.

Every child as the subject of integrated care

The De Cero a Siempre policy changed the way we approached early childhood care, putting children at the centre of the action, bringing about changes in their lives and promoting their overall development. Nowadays, care is provided on a nominal basis. Each child is registered with their name, surname, identification number and location. Also, all the care they receive is monitored and followed up regularly.

To make this happen, we set up the *Ruta Integral de Atenciones* (Integrated Care Route), the policy's main management tool, defining the care that each child



 \triangle Photo: Press Office, Presidency of Colombia

should receive from birth to 6 years of age. A series of services were prioritised, in which each child is given, for example, their own entry in the Civil Registry of Births, membership of the General Social Security System for Health, a full vaccination programme, nutritional monitoring, care and child-raising training for their families and carers, and so on. These services are accountable to institutional recording and monitoring systems, which check and follow up the execution of our early childhood policy. These systems are crucial for preventing risk situations and also taking steps to remedy them.

A joined-up effort across sectors

Specialising – both institutionally and technically – to tackle the challenge of guaranteeing good-quality integrated care, required a huge effort of coordination at the national, departmental and municipal levels. Implementing all this work meant we were able to channel financial and technical resources into matching up institutional supply with territorial demand, as well as including early childhood initiatives in development plans. This prompted us to set up the *Comisión Intersectorial para la Atención Integral de la Primera Infancia* (Cross-Sector Commission for Integrated Care in Early Childhood), which created a structure in line with the objectives of our policy, joining together and coordinating the actions of all the organisations involved in providing integrated care.

Generating partnerships

In addition to all the above, a series of valuable public-private partnerships were established, and these played a key role in the whole process of structuring, implementing and promoting the policy.

As a government, we were deeply touched by the enormous contribution from civil society organisations, private sector companies, academia and the international cooperation bodies, who willingly gave their services to work on early childhood development. We were ready to create the necessary conditions for these actions to be synchronised with policy and in coordination with the State. This would widen the scope of the objective that united us all, that of promoting integrated early childhood development.

Promoting joint responsibility

The principle of joint responsibility sets out that family, State and society are guarantors of the rights of women in pregnancy and of children – in our case, children in early childhood. Bearing in mind this guiding principle of the UN Convention on the Rights of the Child and our country's own laws on this issue, our policy has sought to foster cultural change and influence social norms to make childhood care a top priority. It does so by emphasising the critical role played by families in children's overall development and by encouraging the local community to be proactive in supporting them.

An integrating perspective on development

It is not enough for the De Cero a Siempre policy to concentrate actions on just one single aspect of children's development, we must consider the concept of all-encompassing care. This view involves seeing children as active agents in their own development. It means putting in place new requirements for their families, for the teachers who work with them every day, and for everyone who designs these kinds of programmes and projects.

What the policy means for the lives of children in Colombia

The De Cero a Siempre policy is yet another example of the huge effort this Government is making in a number of areas to help build a better country. This better Colombia demands our pledge that the generation of peace is able to grow up in the best possible conditions.

'We decided to create a programme of comprehensive care that could be adjusted to suit the particular circumstances wherever children were living across the country.' Since 2010, we have invested close to USD 6.8 billion in welfare. This sum is in addition to resources invested by regional bodies, and the USD 100 million administered through public-private partnerships in order to implement the action lines set out in the policy.

The policy is now alive and well across the regions, the same regions that are now experiencing a rebirth following half a century of armed conflict. Through processes of technical cooperation between the country's 32 departments – plus almost a third of the country's municipalities – we have succeeded in strengthening the ability of local authorities and stakeholders to manage and implement the policy.

By providing the right kind of care, enormous progress has been made in the humanisation and flexibility of care delivered to pregnant mothers and very young children. Also, primary education stages have been defined and updated, with 150,000 educators being trained to date in providing integrated care during early childhood.

As part of the First 1000 Days of Life care schedule, more than 4 million children under the age of 6 were registered with the Social Security system, and 95% of children under the age of 1 year have already been vaccinated. In addition to this, we have strengthened the care and child-raising skills of both carers and families, working alongside them using a range of strategies, including giving 7400 'new baby sets' to newborns in vulnerable areas.

To promote access to reading and cultural heritage, we have delivered more than 15 million books and specialist material designed for primary schools and public libraries, in addition to which some 227 reading rooms have been started.

We are proud of the lives we are helping to change for ever, thanks to the 274 new childhood development centres we have opened across the country.

We have also joined the alliance of more than 40 public and private partners to set up a new initiative, *Generación Cero Desnutrición* (Zero Malnourishment Generation), which has set itself the task of eradicating chronic malnutrition in Colombia by 2030.

To consolidate the results of cooperation on early childhood issues, we worked with the Inter-American Dialogue analysis centre, the Bernard van Leer Foundation and other agents to set out the *Agenda Regional para el Desarrollo Integral de la Primera Infancia en países de Latinoamérica y el Caribe* (Regional Agenda for Integrated Early Childhood Development in Latin American and Caribbean Countries), an instrument that will help us gradually improve the care delivered to this population across all our countries. 'The De Cero a Siempre policy changed the way we approached early childhood care, putting children at the centre of the action, bringing about changes in their lives and promoting their overall development.'

The challenges of the De Cero a Siempre policy

Colombia is experiencing an era of sweeping change and, as a result, the De Cero a Siempre policy will always have to be fine-tuned to ensure it responds to the ongoing needs of early childhood.

One major challenge is achieving the universal application of high-quality integrated care and focusing on children who need particular attention, especially children living in the areas worst affected by the armed conflict. This task involves a high degree of coordination between national and regional organisations to clearly define everyone's responsibilities in terms of policy formulation, implementation, monitoring and evaluation.

The same applies to the various bodies in the public and private sector, as well as in civil society, with whom we work extremely closely for the good of our country's children.

Securing peace, our priority

Just as the Bernard van Leer Foundation took the wise decision to concentrate its efforts on children, around 60 years ago, the Colombian State has chosen to put children at the heart of its actions with the De Cero a Siempre policy. This is the best legacy we can leave for the generation of peace, building a solid foundation that empowers Colombia to remain steadfast in its duty to ensure that everyone can fully exercise their rights from before they are born.

Our children are not only the future, they are the present of a Colombia and a world at peace!

'We are proud of the lives we are helping to change for ever, thanks to the 274 new childhood development centres we have opened across the country.'

Placing nurturing care at the centre of global initiatives to improve child health and development

Tedros Adhanom Ghebreyesus

Director-General, World Health Organization, Geneva, Switzerland The 2016 *Lancet* Series 'Advancing early childhood development: from science to scale' estimated that 250 million children (43%) younger than 5 years of age in low- and middle-income countries are at risk of suboptimal development into adulthood because of exposure to the risk factors of poverty and stunting alone (Lu *et al.,* 2016). The addition of exposure to other adversities, such as household or country violence, would increase considerably the numbers of children at risk.

Over the last three decades, scientific findings from a range of disciplines have confirmed that the most critical elements of child, adolescent and adult health, well-being and productivity take shape in the early years (Shonkoff *et al.*, 2012). The period from conception to around a child's third birthday is foundational in this regard, including the so-called first 1000 days of life. This is when the brain develops most rapidly and massive numbers of neural connections are made in response to stimulation, affection and comfort from caregivers (Lagercrantz, 2016). Importantly, though, brain development does not stop at the end of these early years and therefore a life-course and inter-generational approach is important. The health of young people before pregnancy influences foetal development, and optimal early childhood development has a positive impact on adolescents and young adults and, in turn, their own children.

Risk factors for sub-optimal child development include low rates of exclusive breastfeeding and inadequate complementary feeding; stunting; limited cognitive stimulation; caregiver mental health problems; child neglect and maltreatment; disabilities; and exposure to environmental toxins and pollution. Risk factors cluster in households and thus, exposure to one risk commonly means a child is exposed to multiple risks.

Children need nurturing care for their innate capacities to flourish. This means providing young children with a secure environment that is sensitive to their health and nutritional needs, which protects them from danger and abuse, and provides them with opportunities for early learning and interactions that are responsive, emotionally supportive, and developmentally stimulating. Nurturing care consists of five interrelated components: health, nutrition, safety and security, responsive caregiving and early learning. Children who do not experience nurturing care are more likely to grow poorly; be less healthy; learn less and complete fewer grades at school; have difficulties relating confidently to others; and be less productive as adults. They may earn close to a third less than the average annual income of their peers, leading to a debilitating, inter-generational cycle of poverty (Richter *et al.*, 2017). When early childhood development is compromised, it threatens economic development, security and peace as well as human well-being. Conversely, investments in early childhood health and development can yield benefitto-cost ratios of around 10:1, boost learning, adaptability and earnings, and substantially reduce mental health disorders, violence, unintentional injuries, and non-communicable diseases later in life (Heckman, 2015).

The health sector has an important role in determining how children develop their intellectual capacities and socio-emotional skills. Many health and nutrition interventions important for child growth and survival have a direct impact on childhood development (Vaivada *et al.*, 2017). Moreover, the health sector has substantial reach to pregnant women, caregivers and families, and young children, in particular in the period from pregnancy to age 3. The global responses to conditions that threaten early childhood development need to be firmly situated within a number of global initiatives where the World Health Organization (WHO) plays an instrumental role.

The Sustainable Development Goals (SDGs) and the Global Strategy for Women's, Children's and Adolescents' Health

The WHO is committed to the 2030 Agenda for Sustainable Development (United Nations, 2015). This involves a commitment to achieve Goal 3 – Ensure healthy lives and promote well-being for all at all ages – but also support for countries in reaching other SDG targets related to health, nutrition, equality, gender and protection. The Global Strategy for Women's, Children's and Adolescents' Health (2016–2030) aims to ensure that all women, children and adolescents have an equal chance to thrive (*Every Woman Every Child*, 2015). Its 17 targets derived from the SDG framework and its nine action areas are all relevant for children's development.

Universal health coverage

Universal health coverage (UHC) exists when all people receive the quality health services they need but do not undergo financial hardship in order to receive those services. The objective has an important equity dimension and aims to ensure that everybody in a country can access a full range of health services, from promotion and prevention to palliative services. The WHO's work is fully aligned with SDG target 3.8, which focuses on achieving UHC, including financial risk protection, access to quality essential health services and access to safe, effective, quality and affordable vaccines for all. Universal health coverage, reaching the most vulnerable groups, and leaving no one behind, is central to ensuring that all

'Children need nurturing care for their innate capacities to flourish.'



△ Photo: WHO/Christopher Black

children reach their developmental potential. Without UHC, marginalised families and children in rich and poor countries will experience difficulty in receiving basic health services and children will be deprived of essential interventions for their healthy growth and development.

The role of the WHO in the nurturing care agenda

The purpose of the 13th general programme of work (2019–2023) of the WHO is to dramatically improve the health of all people (WHO, 2018). The WHO aims to improve human capital by using innovation throughout a life course approach, with a special focus on women, children and adolescents, to provide integrated services, and to enable people to access the information, goods and services they need to survive and thrive at all ages. Getting it right from the beginning and continuing to get it right across the life course will have substantial dividends, as shown by the evidence that healthy ageing depends on epigenetic adaptations occurring during early childhood development.

The WHO through its member states will assist in creating enabling environments for early childhood development, through high-level and sustained political commitment, an appropriate policy and legal framework, availability of adequate financing and monitoring systems, and inter-sectoral mechanisms for coordination and accountability that are deeply embedded in systems at all levels, down to communities. Engaged communities, relevant information, and quality health services will provide parents and caregivers with the support they need to ensure that their young children grow well, are healthy, learn creatively and are free from violence and injury.

Caring for children is a human rights issue and the Convention on the Rights of the Child places childhood development at the centre of the global agenda. Programming and policy development must have child rights at its core in order to achieve equity. Only with this foundation will we be able to ensure that children with disabilities and young children in conflict and humanitarian settings are not left behind.

It is essential that the approach is one of universal health coverage with interventions and programmes integrated across sectors, including education, social protection and child protection. The WHO will play its role by opening its platforms, facilitating research, developing evidence-based guidelines, and using implementation science to enable countries to scale-up effective interventions that promote early childhood development. The WHO will also address measurement issues, including through supporting the development of new indicators to assess development in children from birth to 3 years of age.

The WHO and UNICEF, supported by the Partnership for Maternal, Newborn, Child and Adolescent Health (PMNCH) and the ECD Action Network, have developed a global Nurturing Care Framework to provide guidance and directions for action (WHO and UNICEF, 2018). The Framework describes how a whole-of-government and a whole-of-society approach can promote and strengthen the nurturing care of young children, what the guiding principles for doing so are, what strategic actions are needed, and the monitoring of milestones essential to progress. We commit to working with our member states and all relevant stakeholders to put the Framework into action, linking survive and thrive to transform human potential.

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References

- Every Woman Every Child. (2015). The Global Strategy for Women's, Children's and Adolescents' Health (2016–2030). New York: United Nations.
- Heckman, J.J. (2015, online). 4 big benefits of investing in early childhood development. The Heckman Equation. Available at: http://heckmanequation.org/content/ resource/4-big-benefits-investing-earlychildhood-development (accessed March 2018).
- Lagercrantz, H. (2016). Infant Brain Development: Formation of the mind and the emergence of consciousness. Cham: Springer International.
- Lu, C., Black, M.M. and Richter, L.M. (2016). Risk of poor development in young children in low-income and middle-income countries: an estimation and analysis at the global, regional, and country level. *The Lancet Global Health* 4(12): e916–e922.

- Richter, L.M., Daelmans, B., Lombardi, J., Heymann, J., Boo, F.L., Behrman, J.R. *et al.* (2017). Investing in the foundation of sustainable development: pathways to scale up for early childhood
- development. *The Lancet* 389(10064): 103–18. Shonkoff, J.P., Richter, L., van der Gaag, J. and Bhutta, Z.A. (2012). An integrated scientific framework for child survival and early childhood development. *Pediatrics* 129(2): e460-72.
- United Nations. (2015). Transforming our world: the 2030 Agenda for Sustainable Development, Resolution A/RES/70/1. Available at: http://www.un.org/ga/search/view_doc. asp?symbol=A/RES/70/1&Lang=E (accessed March 2018).
- Vaivada, T., Gaffey, M.F. and Bhutta, Z.A. (2017). Promoting early child development with interventions in health and nutrition: a systematic review. *Pediatrics* 140(2): e20164308.
- World Health Organization. (2018). Draft thirteenth general programme of work 2019–2023. Geneva: WHO. Available at: http://www.who.int/about/what-we-do/ gpw13-expert-group/Draft-GPW13-Advance-Edited-5Jan2018.pdf
- World Health Organization and UNICEF. (2018). Nurturing Care for Early Childhood Development. A framework for helping children survive and thrive to transform health and human potential. Geneva: World Health Organization. available at: http://www.who.int/ maternal_child_adolescent/child/nurturingcare-framework/en/ (accessed May 2018).

Changing the humanitarian system for young children living in conflict and crisis

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International Rescue Committee, New York, USA Radical changes to the humanitarian system are needed to address the urgent, unmet needs of millions of young children living in conflict and crisis. First, early childhood development must be recognised as a 'life-saving' priority in every humanitarian response. Second, humanitarian organisations must generate meaningful evidence on what works as well as why, for whom and at what cost programmes are most effective. Third, philanthropic organisations must continue to raise the profile of and invest in early childhood development, ensuring it receives the attention and support needed for lasting change.

Around the world, 86.7 million children under the age of 7 have lived their entire lives amid war and chaos (UNICEF, 2016). From Syria to Bangladesh, South Sudan to Niger, these children have witnessed or experienced horrific violence, disaster and loss. Many have been forced to leave their homes, schools and communities to find shelter in temporary settlements, abandoned buildings or camps. A growing body of research points to the likely trajectory for these children. Compounding adversities inherent in conditions of war, disaster and displacement threaten healthy development and can permanently alter brain architecture, epigenetic processes and core physiological systems (Black *et al.*, 2017). The consequences include poor learning outcomes, reduced economic earnings, increased morbidity and early mortality, which in turn affect not only the lives of individual children, but the prosperity, well-being and stability of future generations and societies at large.

The science is clear: without nurturing care, including consistent, responsive adult relationships and opportunities to learn and explore, the future for children living in conflict and crisis is bleak. The 2016 *Lancet* Series on Early Childhood Development highlights cost-effective, evidence-based interventions that can significantly improve the life course of disadvantaged children in a range of complex, low-resource settings (Britto *et al.*, 2017). Perhaps most importantly, the Series presents a firm call for action to address the urgent, unmet needs of young children in adversity, drawing from the extraordinary advances that the science of early childhood development has achieved through decades of rigorous research.

In the past few years, the international humanitarian community has responded to this call to action, signalling the need for early childhood development interventions to break the cycle of poverty, inequality and disadvantage. As



△ Photo: Myrto Koutoulia/IRC

World Bank President Jim Yong Kim said, 'It is clear that we can't achieve our goals of ending extreme poverty and boosting shared prosperity unless we help every child reach his or her full potential' (Kim, 2017: 16). Key partnerships and global networks, such as the Early Childhood Development Action Network, Scaling Up Nutrition, the Global Partnership to End Violence Against Children and the World Health Organization's work to develop the Nurturing Care Framework all play important roles. Yet, despite the increased attention to the importance of early childhood development in disadvantaged settings, the needs of young children living in the most severe conditions of crisis and conflict continue to be neglected.

The John D. and Catherine T. MacArthur Foundation's recent decision to award Sesame Workshop and the International Rescue Committee USD 100 million to create in the Middle East the largest early childhood development initiative in the history of humanitarian response serves as a monumental shift. This landmark investment builds upon the early financing provided by the Bernard van Leer and Open Society Foundations and will reach 9.4 million children over five years in Syria, Iraq, Jordan and Lebanon with engaging, multimedia content designed to reflect the realities of young children throughout the region. The programme will reach 1.5 million of the most vulnerable children through direct services aligned with the recommendations of the 2016 *Lancet* Series on Early Childhood Development, including support for caregivers delivered through home visiting, group sessions and mobile devices to help them provide the nurturing care and stimulation to mitigate the impacts of stress, violence and displacement in the first 1000 days of the child's life; and the establishment of early learning centres within formal and informal settings to provide highquality, play-based learning for the second 1000 days. With this extraordinary investment, our partnership will transform the language, early reading, math, and social-emotional skills of a generation of children affected by the Syrian war.

But to achieve lasting impact for young children living in crisis settings around the world, the MacArthur Foundation's investment must be matched by radical changes to the humanitarian system. First, early childhood development must be recognised as a life-saving priority for any humanitarian response. Second, programmes must be required and funded to generate meaningful evidence on what works, why, how, in which contexts and at what cost. And third, philanthropy must continue to lead by example to drive large-scale investment from governmental and multilateral institutions.

Early childhood development as a life-saving intervention

The United Nations Central Emergency Response Fund (CERF) defines life-saving and core humanitarian programmes as 'those actions that within a short time span remedy, mitigate or avert direct loss of life, physical and psychological harm or threats to a population or major portion thereof and/ or protect their dignity' (UN CERF, 2010). The scientific community has proven 'Radical changes to the humanitarian system are needed to address the urgent, unmet needs of millions of young children living in conflict and crisis.' time and again that the brain is most sensitive to adversity in the first years of life; that this adversity threatens immediate and long-term health, academic achievement and economic well-being; and that evidence-based services for young children can reduce the effects of adversity. These life-saving actions can be taken to protect, mitigate and avert physical and psychological harm to young children. Nonetheless, the humanitarian system does not prioritise early childhood programming in humanitarian response. One indication is funding: of the total humanitarian funding received in 2016, less than 2% was allocated to education, of which only a small fraction was dedicated to early childhood (UNOCHA Financial Tracking Service, 2018b).

The ongoing crisis in Myanmar and Bangladesh serves as a vivid example of this. Since August 2017, approximately 670,000 Rohingya refugees, 60% of whom are children, have fled to Bangladesh from Myanmar (Inter Sector Coordination Group, 2018). Massive displacement, violence, disease and destruction have wreaked havoc on the lives of these children. The humanitarian response plan includes commitments to shelter, food and basic health services - essential services to ensure the short-term survival of these children. It also includes commitments and strategies for emergency telecommunications, coordination and logistics. Yet, despite what we know about the life-threatening effects of neglecting young children, the humanitarian response plan makes no explicit commitment to early childhood development. As of February 2018, the education sector had received less than 6% of the funding it requested (UNOCHA Financial Tracking Service, 2018a). A staggering 332,650 children – nearly 75% of all children in need - are not being reached by education services (Inter Sector Coordination Group, 2018). Early childhood development is life-saving and delivers long-term benefits and yet the story of the Rohingya children proves that the humanitarian community and its donors view early childhood development and education services as low priority programmes in a humanitarian response. This can and must change.

Evidence for early childhood development in emergencies

Boosting investment in early childhood development in the acute stages of an emergency requires a much stronger body of evidence in these contexts, giving proof such programmes are indeed possible and effective. A recent review of evaluation studies conducted within the past 17 years identified only four studies of early childhood impact evaluations and a complete absence of implementation research in humanitarian contexts (Murphy *et al.*, in press). This highlights the vast disparity between investments in research in stable contexts compared to research of early childhood programmes in crisis settings.

Despite significant complexities in crisis-affected places like Bangladesh, Niger, South Sudan and the Middle East, the International Rescue Committee (IRC) has proven that rigorous research of this kind is both essential and feasible.

'The goal is simple: early childhood development as a core pillar of every response strategy in conflict and crisis settings.' The IRC currently has 28 rigorous studies of our programmes, and we carried out the world's first randomised controlled trials of parenting programmes and social-emotional learning programmes in post-conflict and refugee settings (Sim et al., 2014; Aber et al., 2017). Through this experience we have learned that for research to be useful for programmes and policymakers it must answer questions about impact – did the programme work – as well as how programmes are effective, for whom they are effective and what it costs to have an impact. Research must start before a project begins, to assess the needs and resources of children and families and rapidly test and adjust existing strategies so they are practical and feasible within a specific humanitarian setting. Once programme models and content have been adapted and refined, implementation research will capture whether the programme is being delivered with high quality and at what cost. Rigorous impact evaluations can then determine whether programmes have indeed been effective. For early childhood development in crisis settings – a sector so lacking in actionable, policy-relevant evidence - this combination of rapid testing, rigorous implementation and cost analysis and impact evaluation is essential.

The role of philanthropy

Philanthropists have a unique opportunity to be leaders both in early childhood development investment and advocacy and in reshaping the humanitarian response. The goal is simple: early childhood development as a core pillar of every response strategy in conflict and crisis settings. The MacArthur Foundation has shown that philanthropy can provide massive investment and reach, surpassing the scale of any single existing early childhood programme in a humanitarian response. This investment will not only reach an unprecedented number of children, it will catalyse public institutions to prioritise and take action themselves. At the same time, philanthropic organisations must build upon current momentum and identify practical strategies that will lead to systemic change. Important steps to achieving this goal include the convening of global leaders and experts in early childhood development and humanitarian programming; advocating for and investing in research on early childhood development in crisis and conflict settings; disseminating research and translating evidence for policymakers and practitioners; and pushing for replication and scaling of early childhood development in emergency and humanitarian settings around the world.

Conclusion

The MacArthur Foundation has done something remarkable. In five years, Sesame Workshop and the International Rescue Committee will have delivered transformational services for 1.5 million children affected by the Syrian crisis and 9.4 million children and caregivers will experience world-class multimedia educational programming. Together with New York University's Global TIES for Children Center, we will generate actionable evidence on early childhood development programming in conflict and crisis; and we will use this evidence 'For early childhood development in crisis settings, this combination of rapid testing, rigorous implementation and cost analysis and impact evaluation is essential.' to inform the adaptation and replication of programmes for crisis and conflict settings throughout the world. This must be just the beginning. Success will be when early childhood development programming is included in the first days of an emergency response; when cost-effective programme models are implemented across a range of crisis, conflict, post-conflict and fragile settings; when programmes are longer than 18 months; and when investment in programme research results in the establishment of a robust and continually growing evidence base on how to change the trajectory for millions of young children living in conflict and crisis around the world. Success will be when every young child affected by conflict or crisis has access to the early childhood services they need to survive and thrive.

References .

- Aber, J.L., Torrente, C., Starkey, L., Johnston, B., Seidman, E., Halpin, P. et al. (2017). Impacts after one year of 'Healing Classroom' on children's reading and math skills in DRC: results from a cluster randomized trial. Journal of Research on Educational Effectiveness 10(3): 507–29. Available at: https://doi.org/10.1080/1 9345747.2016.1236160 (accessed March 2018).
- Black, M.M., Walker, S.P., Fernald, L.C.H., Andersen, C.T., DiGirolamo, A.M., Lu, C. *et al.* (2017). Early childhood development coming of age: science through the life course. *The Lancet* 389(10064): 77–90. Available at: https://doi.org/10.1016/ S0140-6736(16)31389-7 (accessed March 2018).
- Britto, P.R., Lye, S.J., Proulx, K., Yousafzai, A.K., Matthews, S.G., Vaivada, T. *et al.* (2017). Nurturing care: promoting early childhood development. *The Lancet* 389(10064): 91–102. Available at: https://doi.org/10.1016/S0140-6736(16)31390-3 (accessed March 2018).

- Inter Sector Coordination Group. (2018). Situation Report: Rohingya Refugee Crisis. Cox's Bazar. Available at: https://reliefweb.int/ sites/reliefweb.int/files/resources/180225_ weeklyiscg_sitrep_final.pdf (accessed March 2018).
- Kim, J.Y. (2017). The best investment societies can make. Early Childhood Matters: Advances in early childhood development 126: 15–18. Available at: https://bernardvanleer.org/ app/uploads/2017/06/Early-Childhood-Matters-2017_final-2.pdf (accessed March 2018).
- Murphy, K.M., Yoshikawa, H. and Wuermli, A.J. (in press). Implementation research for early childhood development programming in humanitarian contexts. Annals of the New York Academy of Sciences.
- Sim, A., Puffer, E., Green, E., Chase, R., Zayzay, J., Garcia-Rolland, E. and Boone, L. (2014). Parents make the difference: Findings from a randomized impact evaluation of a parenting program in rural Liberia. New York: International Rescue Committee.

- UN CERF. (2010). Central Emergency Response Fund Life-saving Criteria. Available at: https://www.unocha.org/cerf/sites/default/ files/CERF/FINAL_Life-Saving_Criteria_26_ Jan_2010_2.pdf (accessed March 2018).
- UNICEF. (2016). 87 million children under 7 have known nothing but conflict. Press release 24 March. Available at: https://www.UNICEF.org/ media/media_90745.html (accessed March 2018).
- UNOCHA Financial Tracking Service. (2018a). Bangladesh: Rohingya Refugee Crisis 2017. Available at: https://fts.unocha.org/ appeals/628/summary (accessed March 2018).
- UNOCHA Financial Tracking Service. (2018b). Global humanitarian funding in 2016: Totals per sector. Available at: https:// ftsarchive.unocha.org/reports/daily/ ocha_R16_Y2016___1701190230.pdf (assessed February 2018).

Violence prevention must start in early childhood

Marta Santos Pais

United Nations Special Representative of the Secretary-General on Violence against Children, New York, USA A world free from fear and from violence, where no one is left behind, is the inspiring, ambitious vision of the 2030 Agenda for Sustainable Development (United Nations, 2015). Agenda 2030 gives important impetus to realising the right of every child to grow up in a safe, nurturing environment through two specific targets: ending all forms of violence against children (Target 16.2); and ensuring all children have access to quality early childhood development, care and pre-primary education (Target 4.2). Ending violence and bringing positive change to children's lives must start in early childhood (Santos Pais, 2018).

Imperatives for a nurturing, violence-free early childhood

Ending violence in early childhood is first and foremost a question of children's rights. The United Nations Committee on the Rights of the Child issued a General Comment on child rights in early childhood:

Young children are rights holders. ... They are entitled to special protection measures, and ... they are especially vulnerable to the harm caused by unreliable, inconsistent relationships with parents and caregivers, or growing up in extreme poverty and deprivation, or being surrounded by conflict and violence.

Young children are least able to avoid or resist [violence], least able to comprehend what is happening and least able to seek the protection of others.

There is compelling evidence that trauma as a result of neglect and abuse has negative impacts on development, including, for the very youngest children, measurable effects on processes of brain maturation. (UN Committee on the Rights of the Child, 2005)

One major obstacle to ending violence against children is the perception of early childhood as a period of evolving capacities towards adulthood – and only then is a person a fully fledged human being with inherent rights. This perception must be challenged! The UN Convention on the Rights of the Child recognises all children as rights holders who must be respected and protected, rather than treated as 'not-yet persons'.

A violence-free early childhood matters: scientific evidence shows how the first 1000 days of a child's life are the foundation for a person's whole future development. Children's optimum physical, intellectual and socio-emotional

potential depends on receiving loving care from the very beginning. Science shows that early childhood stress, including exposure to violence, compromises children's health and education, with long-term negative mental and physiological consequences which can cause lasting changes to a developing brain, impacting language acquisition, cognitive functioning and self-control.

The UN Study on Violence against Children highlighted that preventing violence against children would help address longer-term social problems imposing substantial societal costs (Pinheiro, 2006). Today, advances in neuroscience have vastly increased our understanding of how early brain development shapes adult behaviour.

Longitudinal studies show that children exposed to maltreatment are more likely to be victims of violence later in life and of becoming perpetrators themselves. Children who experience violence in their early years are more likely to use violence as adults against partners and their own children, and are at increased risk of engaging in criminal behaviour. Breaking this vicious cycle of violence requires that every child lives free from abuse and neglect.

Extent of violence against children

Despite compromising children's healthy development and its social and economic costs, violence remains a widespread aspect of many children's lives. In 2016, *The Lancet* estimated that 250 million children under 5 years of age in low- and middle-income countries were at risk of falling short of their potential due to adversities in their early years. A 2016 study in *Pediatrics* estimated that over one billion children experienced some form of violence in the previous year (Hillis *et al.*, 2016). UNICEF's 2017 report *A Familiar Face* revealed that:

Three quarters of children aged 2 to 4 worldwide – close to 300 million children – are regularly subjected to violent discipline (physical punishment and/or psychological aggression) by their parents or other caregivers at home, and around 6 in 10 (250 million) are subjected to physical punishment.

These data underline the urgent need to promote better understanding of the impact of violence on young children, and the importance of effective implementation of prevention and response measures.

Ensuring early childhood as a violence-free period is a priority of my mandate as Special Representative and I use every opportunity to promote proven interventions. Effective prevention requires that young children and their families have access to high-quality social services and social protection that support a secure, nurturing family environment. Positive parenting programmes and non-violent forms of child discipline are essential in supporting caregivers with their childrearing responsibilities, providing alternatives to corporal punishment. Data collected by UNICEF (2010) show that most parents do not think violent discipline is necessary. I saw this myself when recently visiting

'One major obstacle to ending violence against children is the perception of early childhood as a period of evolving capacities towards adulthood.'



△ Photo: UNICEF Malawi

a positive parenting programme in Phnom Penh: parents instinctively know that using violence is not the best strategy and are eager to learn non-violent disciplinary approaches.

Economic costs of violence in early childhood

The costs of inaction in addressing early childhood violence are high. Global experience shows that promoting integrated early childhood development policies, which include interventions to prevent and eliminate violence against young children, make economic sense.

Violence against children is estimated to cost the global economy over USD 7 trillion a year through its direct impact on children, families and societies, and on the adult lives of its victims (Pereznieto *et al.*, 2014).

What this enormous figure neglects, however, are the costs resulting from limitations placed on children to enjoy healthy, fulfilling lives as productive members of society. Ending violence against young children helps develop the human capital on which the future of society is built, and reduces the costs of dealing with its later consequences.

Strategies to end violence in early childhood

Ending violence in early childhood requires society's full engagement with, and support for, the implementation of a comprehensive national strategy with four key pillars:

- 1 Protection of young children from neglect, abuse and exploitation must be based on the normative foundation of an explicit, comprehensive, legal ban on all forms of violence in all settings. Today, over 50 countries have enacted specific legislation prohibiting all manifestations of physical, psychological and sexual violence against children in all contexts, including corporal punishment in schools and the home.
- 2 An integrated cross-sectoral approach through strong, effective links between health, nutrition, education, social protection and child protection sectors is critical to ensure children's healthy development. Coordination of service provision maximises the high return on investment in early childhood initiatives, avoiding costs of fragmented interventions. Ensuring coherence in service provision requires a high-level government institution knowledgeable in early childhood concerns and responsible for the prevention of, and response to, violence against children. It must have the capacity to involve multiple sectors, secure adequate funding, and conduct effective results monitoring and evaluation. Strengthening capacities of professionals in early detection and response to violence against young children is key, along with a mandatory duty to report incidents.
- 3 Support to families and caregivers in child rearing is essential and should include responsive national child protection and social protection systems that strengthen families' capacity to create a nurturing home environment, ensure children's safety, and prevent any risk of violence in their lives. Family support also helps reduce child abandonment and placement in alternative care where a nurturing environment for early child development cannot be adequately provided and where young children are at high risk of neglect, abuse and exploitation from staff who may lack appropriate training or feel frustration in their daily work due to low salaries. The UN Guidelines for the Alternative Care of Children are a powerful tool to help states meet their obligations to ensure the right of a child to a safe, violence-free family life (United Nations, 2010).
- 4 Strengthening research and data to monitor the extent of early childhood violence, understanding the attitudes and practices of parents and caregivers, and scaling-up the most effective interventions for the local context remain indispensable to achieving progress in national implementation.

The child rights imperative to end all forms of violence against children, the research documenting effective strategies to end it, the body of science

'Effective prevention requires that young children and their families have access to high-quality social services and social protection that support a secure, nurturing family environment.' showing the devastation violence can cause in young children's development, and the huge costs to society all cry out for our urgent action. The Sustainable Development Agenda targets to end all forms of violence against children and to ensure that all children have access to quality early childhood development are accelerating national level action to bring positive change to children's lives. It is high time to speed up efforts towards 2030 – children deserve no less!

References _

- Hillis, S., Mercy, J., Amobi, A., et al. (2016). Global prevalence of past-year violence against children: a systematic review and minimum estimates. *Pediatrics* 137(3): e20154079.
- Lancet Early Childhood Development Series. (2016). Advancing early childhood development: from science to scale. *The Lancet* 389 (10064): 77–118.

Pereznieto, P., Montes, A., Langston, L. and Routier, S. (2014). *The Costs and Economic Impact of Violence against Children*. London: Overseas Development Institute.

- Pinheiro, P.S. (2006) World Report on Violence against Children: Secretary-General's Study on Violence against Children. Geneva: United Nations. Available at: http://www.UNICEF.org/ lac/full_tex(3).pdf (accessed February 2018).
- Santos Pais, M. (2018). Annual Report SRSG on Violence against Children to the Human Rights Council (A/HRC/37/48). New York: United Nations.
- UNICEF. (2010). Child Disciplinary Practices at Home: Evidence from a range of low- and middle-income countries. New York: UNICEF.
- UNICEF. (2017). A Familiar Face: Violence in the lives of children and adolescents. New York: UNICEF.
- United Nations. (2010). *Guidelines for the Alternative Care of Children* (A/RES/64/142). New York: United Nations.
- United Nations. (2015). *Transforming our World: The 2030 Agenda for Sustainable Development* (A/RES/70/1). New York: United Nations.
- United Nations Committee on the Rights of the Child. (2005). *Implementing Child Rights in Early Childhood*, General Comment No. 7 (CRC/C/GC/7/Rev.1). Geneva: United Nations.

SCALING

'Criança Feliz': A programme to break the cycle of poverty and reduce the inequality in Brazil

Halim Antonio Girade

National Secretary for the Promotion of Human Development, Ministry of Social Development, Brasilia, Brazil¹ Is it possible to implement a programme for early childhood development in a short time frame, particularly one designed for comprehensive child development, in a continental country such as Brazil, with 27 states and 5570 municipalities? Through the 'Criança Feliz' ('Happy Child') programme, we have been gradually learning that it is.

Brazil has over 207 million people and about 11% of those are young children under the age of 6 – and about 42% of them are from families with monthly incomes below the poverty line (Instituto Brasileiro de Geografia e Estatística (IBGE), 2017). Over the last 30 years, the country has witnessed a growing movement on behalf of early childhood. Decentralised social policies have had a significant impact on reducing child mortality. An important legal framework has taken shape: the Federal Constitution of 1988, the 1990 Child and Adolescent Statute, and the 2016 Legal Framework for Early Childhood, aimed at guaranteeing the rights of children.

'Criança Feliz' was instituted on 5 October 2016, through a presidential decree, to promote comprehensive development of children in their early years. Nine months later, on 14 July 2017, the programme's first home visit was officially recorded, in Pacatuba Town in the State of Sergipe.

Given the need to overcome inequalities in Brazil, the Ministry of Social Development (MDS) chose to prioritise the most vulnerable families – those served by the income transfer programme 'Bolsa Família'.

Criança Feliz has two main pillars:

- Home visits aim to promote the strengthening of family skills in particular, the skills of the most vulnerable children. Home visitors are trained using technical material based on the Care for Child Development method developed by UNICEF, the World Health Organization and the Pan American Health Organization, with an additional home visit handbook prepared by the MDS. Pregnant women receive one visit per month; children from birth to 3 years, one visit per week; and children aged 3–6 years, one visit every 15 days.
- This article includes contributions by Sônia Isoyama Venâncio, João Bachur, Cláudio Duarte, Rosângela Maria Sobrinho Sousa, Florentino Leônidas and Marina Silvestre de Alencar Sousa.



△ Photo: Mauro Vieira/Criança Feliz programme/MDS

• Intersectoral initiatives seek to strengthen regional policies for social assistance, healthcare, education, culture, human rights and children's rights. It is important, for example, that all children have their *Caderneta da Criança* (Child's Booklet) updated with nutritional follow-up and vaccination records.

While coordinated by the National Secretariat for the Promotion of Human Development (SNPDH), within the MDS, the implementation of Criança Feliz is developed by states and municipalities. At each of the three levels of government – federal, state and municipal – the programme has an intersectoral steering committee and a technical group, alongside a coordinating body. The national level is responsible for coordinating national actions, supporting states, and formulating training strategies. States are responsible for implementation in their area, awareness-raising initiatives, mobilising and training municipal supervisors, and monitoring. Municipalities are responsible for implementing the programme at local level: training home visitors, planning visits, supervising the field work, and monitoring and assessing the visits. The programme had a budget of about USD 98 million for 2017, rising to a projected USD 167 million in 2018. The federal government transfers funds to the states, through the National Social Assistance Fund, to cover training, expenses, and transfers to each municipality: R\$ 75 (about USD 23) per month per visited individual, provided that home visitors follow the rules regarding number of visits per month. Home visitors must have at least high school degrees. In a cascading capacity-building strategy, they are trained by municipal-level supervisors, who in turn are trained by the so-called state-level multipliers – in both cases, these supervisors require college degrees, and the state-level multipliers are trained by the national technicians. Each municipal supervisor is responsible for up to 15 home visitors, and each home visitor can attend to up to 30 children or pregnant women. Supervisors are paid an average of USD 609 per month, and home visitors USD 318 per month. To put that into context, Brazil's average wage is around USD 655 and the minimum wage is USD 228.

Criança Feliz ultimately aims to reach 3 million children and 640,000 pregnant women, including 75,000 children with disabilities and 8600 children under special protection measures. Of these, around 738,000 children should be reached by December 2018, in phase one; and 1.5 million by the end of 2019, in phase two.

Provisional lessons learned in reaching scale

At the time of writing, the programme has been in existence for 16 months. Most of the training at the state level was carried out from February to June 2017. Of the country's 27 federal units (comprising 26 states and the federal district), 25 enrolled in the programme. Of the 5570 municipalities, 2614 had joined by January 2018. Of those, 1856 had started conducting home visits, involving 185,910 children and 26,383 pregnant women. Figures 1 and 2 show how programme implementation has advanced, by number of municipalities that initiated the visits and by individuals reached, respectively.

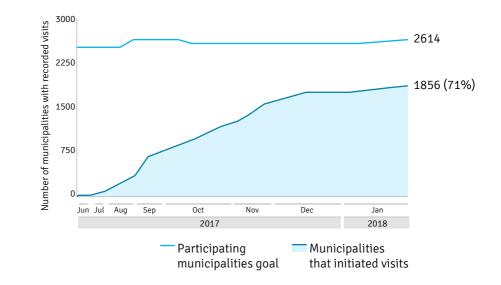
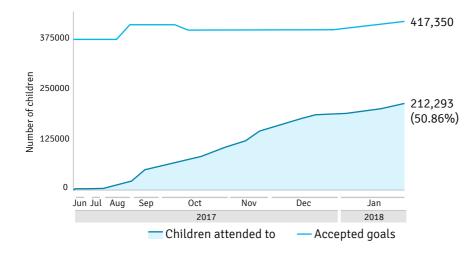


Figure 1 Progress of implementation: municipalities with Criança Feliz home visiting Source: Prontuário SUAS, 2018



 ✓
 Figure 2 Progress of implementation: children reached by Criança Feliz
 Source: Prontuário SUAS, 2018

What factors were most significant in reaching such a scale in a relatively short time? The approval of the Early Childhood Legal Framework paved the way for the Presidential Decree creating the programme. In both cases political leadership was key, with significant involvement of the Parliamentary Front for Early Childhood. One of its leading figures and an author of the bill creating the framework, Osmar Terra, became Minister for Social Development and made Criança Feliz a priority. As the Minister stated: 'In the first thousand days of life, transformations happen in the brain which make this the most extraordinary period of the whole cycle of life. During this time the basic skills for learning about the world we live in are formed.'

Awareness raising and mobilisation were fundamental: the nationwide launch was followed by state and local events, with the participation of governors and city officials. So was the involvement of different sectors at three levels of government: health, education, culture, social assistance and human rights. The programme also had the support of national and international partners, including the Bernard van Leer Foundation, the Maria Cecília Souto Vidigal Foundation, PAHO and WHO, the Better Early Childhood programme ('Primeira Infância Melhor'), UNICEF, United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Development Programme (UNDP) and the Institute of Education and Research (INSPER). Among other things, these partners supported the development of technical material and the training methodology, as well as contributing to the monitoring of the programme and its evaluation: starting a programme of this magnitude makes sense only if these are fully defined and prepared. For instance, the Bernard van Leer Foundation's support was crucial to the beginning of capacity building of state coordinators.

Technology was also put to good use. A computerised platform was established to facilitate states and municipalities enrolling in the programme, which requires the approval of the local social welfare council. Implementation monitoring has been carried out daily and weekly, with the use of a computerised system called *Prontuário SUAS*. WhatsApp has proved extremely useful for national, state and municipal coordinators, home visitors and supervisors to keep in contact

and exchange experiences, documents, photos and videos; it is also a stimulating, motivating and strengthening factor for interaction among government bodies, humanising the implementation of the programme.

Challenges and prospects

It is important to constantly follow up on implementation, to monitor intersectoral indicators, and to assess the programme itself, in order to identify opportunities for continuous improvement. Beyond this, at the end of its first year of implementation we can identify several notable challenges:

- defining strategies for its consolidation and sustainability as a national policy
- continuing to expand while maintaining minimum quality standards
- establishing permanent models for training supervisors and home visitors
- sustaining and increasing intersectoral initiatives, in particular concerning women and child health and food and nutrition security
- offering quality early childhood education, improving parental schooling, and providing social support to the most vulnerable families
- maintain the speed of the scaling up in a year (2018) of federal and state elections
- maintain early childhood development as priority for the next governments.

For Criança Feliz to ensure political support and financial resources for the coming years, it is necessary to constantly invest in informing and mobilising institutions, families and society at large for everyone to recognise the importance of promoting early childhood development.

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Reference

Instituto Brasileiro de Geografia e Estatística. (2017). *Síntese dos Indicadores Sociais.* Available at: https://www.ibge.gov.br/ estatisticas-novoportal/sociais/trabalho/9221sintese-de-indicadores-sociais.html (accessed February 2018).

Parenting for happiness: blending child well-being and Gross National Happiness

Karma Gayleg

Senior Programme Manager, Ministry of Education, Thimphu, Bhutan In Bhutan, the pursuit of Gross National Happiness (GNH) is defined as the government's goal in the 2008 constitution. It is a central underpinning for all endeavours in social and economic development – including early childhood. The government has recently started to implement a parenting programme with the aim of reaching all parents by 2030. Driven by GNH, this programme encourages parents to look beyond managing behaviour, cognitive stimulation, health and nutrition. It has a strong emphasis on socioemotional learning, culture, environment education and moral and spiritual development, and encourages parents to teach children values and skills such as environmental ethics, mindfulness, compassion and responsibility. In line with the GNH model's focus on outcomes, it motivates parents with a long-term vision of what they would like their children to be like.

In GNH, happiness is defined not just as individual gratification but includes communal harmony and peace (Thinley, 2005). Individual and collective happiness are seen as coming from a society that is fair, just and equitable, where we look after the environment, the source of all our wealth and resources; uphold the values on which our families and society were built, while respecting others that differ from our own; share the benefits of economic development and prosperity among all; and work with honesty, transparency, accountability and efficiency. Human qualities of self-discipline, empathy and compassion are desired.

As such human qualities are largely shaped early in life, the need for proper care and stimulation of young children is recognised as fundamental. Parents have a huge role in laying the foundations of children's behaviour, attitude and abilities (Al-Matalka, 2014). They can do this in many ways, including responsive care, providing a secure and stable environment, psychosocial stimulation, and acting as good models of positive social and emotional values (Desforges and Abouchaar, 2003). It is critical that parents understand how children develop and how best they can support this process.

Not all parents are equipped with the knowledge and skills they need. Many children today grow up in high-rise apartments with little orientation to the natural and cultural worlds, almost no opportunities for outdoor play and socialisation, excessive unguided exposure to digital media, and little nourishment for the body or the mind; some have not even seen a book or a toy until they go to school (Gayleg, 2018). While poverty and socioeconomic factors are dominant causes of these issues, they can also be attributed to reduced opportunities for parents to be with their children, and lack of understanding of how to support and care for their children so that they grow up to be healthy, happy and caring human beings.

A thematic approach

With the help of UNICEF, the government of Bhutan has developed an early childhood parenting model with a thematic approach that aspires to address the health, learning and protection needs of young children, encapsulated in a child well-being framework. The curriculum seeks to equip parents with skills to effectively support children's development, blending modern best practices and cultural practices that support of children's development. It recognises the role of parents in improving the well-being and developmental outcomes of children and their role in improving communities and workplaces as they grow up.



[△] Photo: Karma Gayleg

The parenting programme integrates child development outcomes and GNH ideals in three themes – seeking to ensure that all children are strong and healthy; smart and happy; and safe and protected. Over 16 sessions grouped into four stages, parents engage in dialogue that enables them to share their experiences and support each other, prioritising social and education equity, active participation of fathers in parenting, and inclusion.

- The first stage provides parents with the opportunity to discuss their views about what children need to be healthy, smart and safe, identifying practical challenges to well-being and discussing how these challenges could be overcome.
- The second stage enables parents to reflect on the importance of teaching cultural, moral and spiritual values to young children and relating these to their current parenting practices, encouraging them to share what they do and why. The process helps parents to understand the practices of others within the community and to share them with their family members and try at home.
- The third stage enables parents to learn how to assess child development milestones using pictorial child development tools to help them understand, observe, assess and support their own children. Parents are encouraged to develop homemade low-cost toys to stimulate their children at different ages and stages, observe their developmental progression and track it using cards. In the process, they also learn how to identify and support children with developmental delays and disabilities, reaching out to each other and building support networks for a group approach to parenting.
- The fourth stage helps parents to reflect on their experience in the parenting education programme and to see how they have improved in both their understanding of the child well-being framework and their own parenting practices at home. The idea is also to help them collaborate and help each other in parenting young children, thereby establishing a network for mutual support and sustaining the effort to educate all to be good and happy parents.

The model recognises that while increasing the awareness and skills of parents can address many issues, parents are not able to solve all problems on their own. The African saying 'it takes a village to raise a child' has never been more true: communities, policymakers and civil society need to work together for children's development.

The path to scale

The parenting programme is delivered through government-supported preschools in villages. It takes about a year to complete. The programme is delivered by facilitators who are appointed and paid by the government and trained, with the support of UNICEF, to run both the preschool programme and the parenting programme. The facilitators are assisted by village health and agriculture workers and the village school principal. On average, groups of about 15 parents at a time participate in the sessions, often with a mix

'The model recognises that while increasing the awareness and skills of parents can address many issues, parents are not able to solve all problems on their own.' of children from birth to age 8: parents of older children can share their experiences with parents of younger children, and discuss parenting issues and how they could be overcome.

The programme is compulsory for all parents who have children in the government-supported community preschool – and, as the government-supported preschools are popular, many parents of under-3s are motivated to attend the programme by the prospect of their children being able to attend the preschool. Initially one member of each family attends, and eventually every member gets the opportunity. Any other parent can also choose to enrol, and all are encouraged to do so – although without an incentive such as a preschool place, it is a challenge to persuade parents to attend, as many work full time and are tired in the evenings.

The community early childhood centres to which the preschools are attached currently cover 21.8% of children aged 3–5, and the ambition is to scale-up their coverage along with the parenting programme. The goal is to achieve 50% coverage by 2024, and universal access by 2030. In future, as the parenting programme expands, it could also be delivered through other platforms such as health services, primary schools and non-formal education programmes. While targeted at parents in rural areas and poor urban districts, as they are the most vulnerable groups, the parenting programme would be beneficial for all kinds of parents including working parents, illiterate parents, and parents from low socioeconomic backgrounds.

As the programme is just beginning to be implemented, no evaluations have so far been conducted. Its effectiveness will ultimately be measured by improvements in child well-being through improved parenting practices associated with positive developmental outcomes and increased actions in the community to improve early learning, parenting and child services. For now, it is believed that this parenting education model will contribute not just to improving parenting practices by blending child development science and Gross National Happiness principles, but also to building harmonious communities that support each other in raising children who are strong, healthy, happy and caring.

References

- Al-Matalka, F.I.M. (2014). The influence of parental socioeconomic status on their involvement at home. International Journal of Humanities and Social Science 4(5): 146–54.
- Desforges, C. and Abouchaar, A. (2003). The Impact of Parental Involvement, Parental Support and Family Education on Pupil Achievement and Adjustment: A literature review, vol. 433. Nottingham: DfES Publications.

Gayleg, K. (2018). Happiness in the Early Childhood Curriculum. *Scoonews* 2(7): 22–4.
Thinley, J.Y. (2005). What does Gross National Happiness (GNH) Mean? In: Centre for Bhutan Studies (2007) *Rethinking Development*, Proceedings of the Second International Conference on Gross National Happiness, Antigonish, Canada, 20–24 June 2005. Available at: http://www.bhutanstudies.org. bt/publicationFiles/ConferenceProceedings/ RethinkingDevelopment/Rethinking%20 Development.pdf (accessed February 2018).

Reaching the youngest children: an approach for health system integration

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1 Statement from PATH: PATH is the leader in global health innovation. An international nonprofit organisation, PATH saves lives and improves health, especially among women and children. PATH accelerates innovation across five platforms - vaccines, drugs, diagnostics, devices, and system and service innovations - that harness our entrepreneurial insight, scientific and public health expertise, and passion for health equity. By mobilising partners around the world, PATH takes innovation to scale, working alongside countries primarily in Africa and Asia to tackle their greatest health needs. With these key partners, PATH delivers measurable results that disrupt the cycle of poor health. For further information, visit www.path.org.

The foundation for lifelong health and well-being is laid during the earliest years, from pregnancy through a child's third birthday. Emerging science underscores the life-altering benefits of providing good care, stimulation, and opportunities for learning throughout this period: children are more likely to grow up to be healthier, better-educated adults, with improved socioeconomic outcomes. In most low-resource settings, however, early childhood development investments still focus primarily on preschool-age children and miss the critical window of opportunity during the early years, when developmental delays may be mitigated – or avoided altogether.

Since 2012, PATH has been working to fill this gap by championing an approach that uses health systems to scale-up early childhood development services for the youngest children.¹ This work began in relative isolation, with PATH often a lone voice at the national level, advocating for changes that policymakers and other influencers were not yet ready to act on decisively. But events over the past two years have dramatically altered this landscape and sparked a collective global and national shift to ensure that children not only survive, but thrive.

Innovating to reach the youngest children

Because of PATH's long-standing work to improve child health and nutrition, we recognised an opportunity to address early childhood development more broadly in the context of the health system. In 2012, an initial landscaping of early childhood development programmes and policies in Kenya, Mozambique and South Africa confirmed what PATH suspected – that beyond the health sector, few services existed that were designed for children under 3 years old. The following year, we began adapting early childhood development models for the health system and piloting the World Health Organization's (WHO) and UNICEF's *Care for Child Development* framework to train service providers in Kenya and Mozambique.

Although PATH made progress in demonstrating the feasibility of this new approach and gradually increasing programme size, these interventions for young children were still not widely seen as an issue for the health sector, and a major expansion supported by clear government policies and commitment was a distant prospect. In 2016, however, *The Lancet*'s landmark series on early child development affirmed the health system as the primary entry point to reach young children and their caregivers. It also introduced the concept of 'nurturing care' – comprising health, nutrition, responsive caregiving, early learning, and security and safety – as a critical set of linked interventions needed to achieve optimal developmental outcomes. The series highlighted the urgent need to integrate these interventions into routine health services. It also accelerated PATH's work, spurring partnerships with WHO, UNICEF, and many national governments who were becoming increasingly interested in this effort.

An adaptive model

Based on evidence, experience and country need, PATH uses the health system as an entry point for supporting families to enable their children to thrive, through a three-pronged approach:

- integrating early childhood services into all elements of a health system, from training service providers, to providing support and supervision, to ensuring that information systems capture relevant data
- expanding the evidence base for health sector integration of early childhood development programming in low-resource settings and disseminating lessons learned
- strengthening the enabling environment by including early childhood development content in policies, guidelines, training curricula, and government work plans and budgets.

Between 2011 and 2017, PATH implemented a large health systems strengthening programme in South Africa, where early childhood development was a critical component of the minimum package of services provided through community-based services. PATH currently supports government efforts to scale-up health systems-based early childhood development services in Côte d'Ivoire, Kenya, Mozambique, and Zambia. Notably, PATH has contributed to the integration of nurturing care into 11 district health systems in Kenya and Mozambique. Both countries are scaling-up integration, ultimately reaching a population of at least 2 million by 2020. In implementing this health systems approach, PATH works closely with policymakers, technical staff and civil society to align interventions with existing structures and resources, and to ensure that government is in the driver's seat.

Establishing strong nurturing care service delivery systems

Healthcare workers are often the first and only service providers who regularly interact with children under 3 and their caregivers. PATH's approach aims to give these staff the training, tools and resources necessary to integrate nurturing care into community- and facility-based health services. First, PATH builds a cadre of government trainers and supervisors by incorporating information on early childhood development into training on standard packages of care, such as WHO's Integrated Management of Childhood Illness (IMCI). In addition to being cost-effective, this model enhances government ownership and reinforces the inclusion of nurturing care as an essential component of the health system.

'Since 2012, PATH has been championing an approach that uses health systems to scale-up early childhood development services for the youngest children.' These trained staff then build the capacity of service providers to integrate content on nurturing care into routine service delivery – including antenatal and postnatal care, child immunisations and growth monitoring, paediatric services, and community-based interventions. Health facility staff, for example, learn to provide counselling on age-appropriate play and communication activities, assess developmental milestones, and refer children with suspected developmental delays. Community-based service providers also reach children and caregivers during home visits and structured play sessions in health facility waiting areas.

Training service providers is just the first step. PATH also supports structured mentoring, whereby mentors directly observe the counselling skills of trained staff and provide coaching on areas of weakness. In Kenya and Mozambique, we are working with the government to formally incorporate supervision on early childhood development into the health system by updating supportive supervision norms and tools.

Bolstering evidence and learning for early childhood development in the health sector

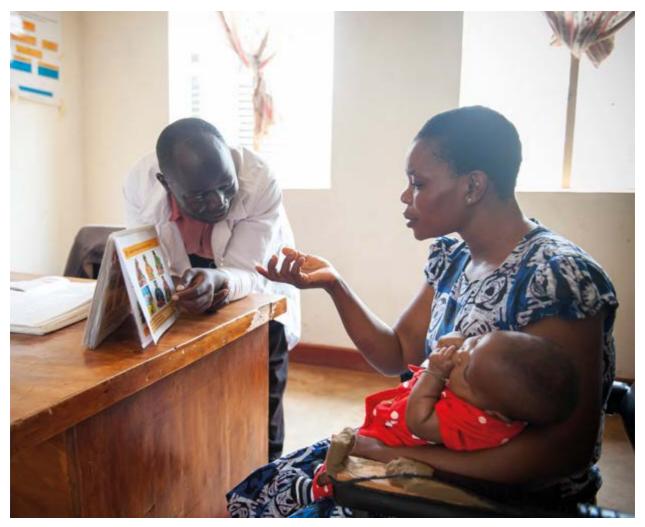
The evidence base for delivering early childhood development services through the health sector is still limited, and many existing studies may not be applicable because they take place in tightly controlled research settings. Moreover, little research completed to date focuses on sub-Saharan Africa. PATH is working to address these gaps. In Mozambique, we have conducted three evaluations on the feasibility and acceptability of integrating content on nurturing care into home visits and facility-based services, as well as implementing play sessions in health facility waiting areas. According to findings, not only is integration feasible in low-resource settings, it improves caregivers' perceptions of service quality. This has generated the political will to scale-up such integrated services nationally. It has also created interest internationally.

Working with local partners in Kenya, PATH is conducting further research to evaluate the impact of health sector integration on the knowledge, attitudes and practices of caregivers, as well as child growth and developmental outcomes. The study will also estimate the cost-effectiveness of integration and offer learnings for anticipated expansion, led by national governments, into new regions and countries.

Building an enabling policy environment

Political will and government commitment at all levels are essential to place early childhood development services within the health system at scale. Through advocacy, PATH aims to integrate nurturing care into relevant national policies and guidelines. In Kenya, for example, previous child health strategies and guidelines primarily focused on child survival. PATH advocated 'Political will and government commitment at all levels are essential to place early childhood development services within the health system at scale.' for the development of the Neonatal, Child and Adolescent Health Policy as an overarching guide for all child health services, and ensured that the policy included content on nurturing care for children from birth to age 3.

To translate policy change into service delivery, it is critical to modify curricula and job aids. In Mozambique, PATH's advocacy efforts resulted in the inclusion of early childhood development content in the pre-service training curricula of nurses and community health workers, which are now under revision. This is particularly important for sustainability and reaching scale, as in-service training is expensive. PATH also facilitated a series of consultations in Kenya and Mozambique to strengthen content on developmental screening and counselling in revised IMCI programme packages, which guide the delivery of health services.



△ Photo: Joop Rubens/Conrad N. Hilton Foundation

Finally, PATH advocates for the integration of nurturing care services into routine data collection systems. For example, we worked with the Ministry of Health in Mozambique to revise maternal and child health data registers to include relevant indicators. The significance of this is twofold. First, it will enable the government and other stakeholders to track – for the first time – the number of children receiving early childhood development services, as well as the number of children with suspected developmental delays. Second, a formally approved Ministry of Health tool helps service providers view early childhood development as a part of their routine work, rather than a partner-promoted intervention with parallel data collection.

Global momentum and national commitment

At global and national levels, a shift in perspective is clear: increasingly, early childhood development is viewed as an important focus of the health sector. Many governments are poised to lead the introduction or expansion of nurturing care integration into the health system and are prepared to commit resources to the 'thrive' agenda. PATH's approach offers a road map for governments and partners interested in this work.

We recognise that health systems are not overhauled overnight. But emerging evidence, country leadership and an aligned global community are enabling significant progress to be made in reaching children and their caregivers in their earliest years.

Reference .

The Lancet. (2016). Advancing Early Childhood Development: From science to scale. Available at: http://www.thelancet.com/series/ECD2016 (accessed February 2018).

Latin America and the potential of the Nurturing Care Framework as a platform for scale

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Bernard van Leer Foundation, The Hague, Netherlands Latin America has a prolific history of developing systems, public policies and programmes that recognise the importance of investment and cross-sector action in early childhood issues. Some of these were adaptations of European and North American models (of which Head Start, BankStreet, High Scope and Reggio Emilia were among the most popular) while others were home-grown and designed to respond to the specific needs of regional diversity.

With awareness now growing about the importance of early childhood development, a brief overview of the region's experiences can offer insights into the challenges of reaching the most vulnerable childen at scale. Many of these experiences anticipated the new Nurturing Care Framework, which describes a set of targets, actions and policies needed to guarantee that every child has a fair start in life, offering countries a platform on which to build coordination among sectors and institutions.

In the 1960s and 1970s, against a backdrop of industrialisation and poverty reduction policies, early childhood programmes were focused mainly on providing daycare services to help women engage in income-generating activities. Examples include 'Hogares Comunitarios' in Colombia, 'Wawa Wasi' in Peru and 'Hogares de Cuidado Diario' in Venezuela. However, the quality of such programmes was often compromised as they expanded.

In the 1980s, increasing activism in defence of children's rights saw nongovernmental organisations introduce countless innovations in integrated care that promoted children's cognitive and social-emotional development. Debates opened up on approaches to children's ability to build their own learning and the mediating role played by their primary carers. Unfortunately, this was the 'lost decade' economically for Latin America: while many public programmes were scaled up, their focus continued to be narrowly on survival rates, nutrition and daycare for working mothers.

In the 1990s, cross-sector programmes and policies were established that focused on early childhood for its own sake. They were driven by the United Nations Convention on the Rights of the Child, the spread of neuroscience and inter-governmental regional meetings promoted by the Organization of American States, international agencies, and national and regional networks of early childhood advocates. The Cuban programme 'Educa a tu Hijo', which



△ Photo: Eleazar Cuadros/Bernard van Leer Foundation

integrated education and health in a combinination of home visits and care centres, became a model for others in the region, such as CENDIS in Mexico and Brazil's 'Primeira Infância Melhor'.

The new millennium has seen models that were precursors of the Nurturing Care Framework. Chile, under President Bachelet, created 'Chile Crece Contigo', a cross-sector policy of early childhood support programmes. In Colombia, President Santos is promoting an integrated care policy for children from birth to age 5, based on public-private collaboration to deliver cross-sector early childhood services. Brazil's rapidly expanding 'Criança Feliz' programme, which provides home visits to vulnerable families, reflects a legal Framework for early childhood approved in 2016 that facilitates coordination among sectors including education, care, health, housing, income, nutrition, safety, recreation, mobility and public space. 'Cuna Más' in Peru is among other recent cross-sector programmes which focus on the quality of interaction between primary carers and children.

Current cross-sector early childhood policies in Latin America are rooted in early innovations from past decades. Together with regional meetings, they led to the emergence of new generations of early childhood professionals and promoters who now see the Nurturing Care Framework as an opportunity to build on lessons learned and address outstanding challenges such as maintaining quality, record keeping, assessment and disseminating good practice.

Even in countries where the conceptual contributions of the Nurturing Care Framework are already being applied, this new platform will provide clear benefits. It will serve as a basis for the spread of legal Frameworks that guarantee the cross-sector nature of early childhood policies throughout the region. It will confirm that countries already making huge progress in these issues are on the right track. And, above all, it will provide good arguments for those who appreciate the role played by nurture in raising children and the task of taking the needs of fathers, mothers and primary carers into account in formulating public policy.

'Latin America has a prolific history of developing systems, public policies and programmes that recognise the importance of investment and crosssector action in early childhood issues.'

Every Woman Every Child: investing in the early years for sustainable development

Nana Taona Kuo

Senior Manager, Every Woman Every Child, New York, USA The Sustainable Development Goals (SDGs) are ambitious and integrated in nature, requiring strengthened multi-sectoral partnerships to deliver on a transformative and universal agenda that leaves no one behind. The multi-stakeholder platform *Every Woman Every Child* (EWEC), spearheaded by the United Nations Secretary-General, places the health and well-being of women, children and adolescents at the core of the SDGs and unites partners across sectors to deliver on this integrated agenda. EWEC's *Global Strategy for Women's, Children's and Adolescents' Health* (2016–2030) aims to serve as a front-runner roadmap for countries to implement the SDGs in a way that addresses inequities and strengthens fragile health systems (EWEC, 2015). A child's earliest years present a window of opportunity to address inequity and achieve sustainable development for all.

Every Woman Every Child recognises the significance of investing in the early years through a health lens, and makes recommendations about targeted early childhood development interventions through its *Global Strategy*. Such investments are some of the smartest a government can make to break the cycle of poverty and improve outcomes later in life. Yet some 43% of children under 5 in low- and middle-income countries are not achieving their full potential. The EWEC *Global Strategy* takes a life-course approach and encourages cross-sectoral collaboration to help offer all children, in all settings, a fair start to life so they not only survive but thrive and transform their communities. EWEC further works to build out linkages to adolescents through targeted health investments, to ensure a continuum of care and unlock dividends for generations to come.

Nevertheless, continued political momentum and commitments are needed to ensure urgent and accelerated action at country level. Since 2015, over 65 countries and over 180 organisations have made commitments to advance the updated EWEC *Global Strategy*, with total pledges worth more than USD 28 billion, with multi-stakeholder partners reaching around 273 million women and girls so far. At least 80% of these pledges align closely with the Thrive pillar of the EWEC *Global Strategy*. Early childhood development is also one of the six focus areas identified by the High-level Steering Group for EWEC in the EWEC 2020 Partners Framework for increased and concerted attention through 2020. The High-level Steering Group is led by the UN Secretary-General, António Guterres, and aims to inspire and facilitate collective political advocacy at the highest level and accelerate action for results.

Quality health, education, nutrition, protection, a child-friendly built environment and nurturing care at the right time in a child's life enable healthy brain development, which improves children's capacity to learn and increases their productivity in adulthood. While investments in each of these sectors are important on their own, they are insufficient to create positive holistic change in the life of a child. Collectively, however, these human capital investments are greater than the sum of their parts, creating healthier, more prosperous, resilient and economically vibrant societies for generations to come. EWEC has had a strong focus on cross-sector collaboration to unlock the full potential of women, children and adolescents. This is further reflected in EWEC's active engagement in the Global Partnership Initiative launched in November 2016, with the Global Partnership for Education (GPE), Sanitation and Water for All (SWA), and the Scaling Up Nutrition (SUN) Movement, who have collectively developed a Partnership Playbook to guide principled collaboration and came together under the umbrella of early childhood development last year in the margins of the UN General Assembly to promote cross-sectoral investments in the early years.



△ Photo: UNICEF/UN075634/Nesbitt

In order to further deliver tangible results and support country-level implementation, the EWEC architecture provides an unparalleled harmonising mechanism that ensures streamlining around financing, programming, advocacy, partnering and accountability in a shifting development landscape. Alignment across the core components of the EWEC ecosystem – the Global Financing Facility (GFF), the Partnership for Maternal, Newborn and Child Health (PMNCH), the H6 Partnership (WHO, UNICEF, UNFPA, UNAIDS, UN Women and the World Bank) and the Innovation Market Place – helps to operationalise stronger coordination for action and impact.

By offering the best start to life to all children, in all settings, through targeted, cross-sectoral investments in their earliest years, EWEC is committed to helping children reach their full potential and grow into healthy adolescents and empowered, engaged adults to build a sustainable future for all.

Reference .

Every Woman Every Child. (2015). The Global Strategy for Women's, Children's and Adolescents' Health (2016–2030). New York: United Nations.

Learning from Saving Brains: informing policies and scale-up for early childhood

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Professor, Director, MARCH Centre, London School of Hygiene & Tropical Medicine, London, UK Saving Brains is a multi-institution, multi-donor partnership led by Grand Challenges Canada which awarded 84 grants to innovation projects across 31 low- and middle-income countries between 2011 and 2017.¹ The overall aim of Saving Brains is to develop sustainable and scalable ways of nurturing healthy brain development in the first 1000 days of life. Through technical support and leadership development, Saving Brains provides an opportunity to demonstrate proof of concept, to 'transition to scale' grants, which progress selected interventions towards larger scale and sustainability.

As one of the largest investments in early childhood interventions in low- and middle-income countries (Milner *et al.*, 2016), the Saving Brains portfolio has unique potential to inform understanding of processes towards scaling.

While the portfolio was not designed to explicitly explore all steps from demonstration of intervention effectiveness to policy and programme implementation, it was developed around a portfolio-level theory of change and structured monitoring framework to assess progress along this pathway. Even in 'seed' grants, teams were encouraged to consider factors relevant to scaling. As such, Saving Brains provides a unique opportunity to explore questions around implementation of early childhood development interventions in diverse settings with increased focus on scale.

It does so at a critical moment for early child development. Global attention is increasing, from the Sustainable Development Goals (United Nations, 2015), to the *Lancet* series 'Advancing Early Childhood Development: from Science to Scale' (Britto *et al.*, 2017; Daelmans *et al.*, 2017; Richter *et al.*, 2017), to UNICEF's *Early Moments Matter for Every Child* report and the launched *Nurturing Care Framework for Early Childhood Development*, led by UNICEF and the World Health Organization (WHO) and supported by the Partnership for Maternal Newborn and Child Health and Early Childhood Development Action Network (UNICEF, 2017; WHO and UNICEF, 2018).

There is now an opportunity to translate this global attention into largescale implementation in multiple countries. Analyses of the features of global public health networks which influence their effectiveness in driving action against target challenges have identified the global political context, growth in number of actors and developments in early childhood development metrics, as favourable, but also significant ongoing challenges – notably framing and governance (Shiffman *et al.*, 2016; Shawar and Shiffman, 2017).

In 2016–2017, the London School of Hygiene & Tropical Medicine undertook a participatory mixed-methods impact and process evaluation of 39 interventions across the Saving Brains portfolio. Its primary aim was to understand programming, policy and research lessons learned for scaling interventions across contexts (Milner *et al.*, 2016). Using the UNICEF and WHO Nurturing Care Framework terminology, 84% of interventions in the portfolio focused on responsive caregiving; of them, 63% were delivered through the health system, 25% through early learning facilities and 12% in the community. Among all interventions, 49% focused on nutrition and/or health, and a smaller proportion (9%) on child safety and security (Milner *et al.*, 2016). We suggest three ways in which the Saving Brains portfolio points towards opportunities to strengthen action and overcome challenges related to implementation at scale.

1 Extending networks and supporting leadership development with scaling in mind

Saving Brains invests in teams in low- and middle-income countries whose members come from diverse professional backgrounds representing a range of sectors, and in proposals which integrate scientific, social and business models (Saving Brains, 2018). While a number of other early childhood development networks are now supported by major funders, Saving Brains is unique in its deliberate drawing-in of new actors, including academics, to explore implementation and transition to scale in diverse settings. Networks in early childhood need to expand to include consumers of information, not just generators, so that evidence can have a greater impact in implementation.

Qualitative feedback through evaluation of the Saving Brains portfolio also highlighted the value of investing in local leadership development for early childhood development. Saving Brains offered teams from low- and middle-income countries a structured leadership development programme during proposal development and the grant cycle. This included webinars and workshops, access to a broad range of technical experts and, to varying degrees, peer-to-peer learning through Saving Brains Community meetings. Moving forward, increased opportunities for peer-to-peer learning and investment in leadership development beyond the time limitations of grant cycles will be important to support scaling.

2 Framing challenges with greater clarity and striving towards solutions

'Framing' or 'the generation of internal consensus on the definition of the problem and solutions' has been identified as a challenge to the effectiveness of global early childhood development networks in driving progress (Shawar and 1 Grand Challenges Canada (funded by the Government of Canada) funded the portfolio evaluation described in this article. Saving Brains is a partnership of Grand Challenges Canada, Aga Khan Foundation Canada, the Bernard van Leer Foundation, the Bill and Melinda Gates Foundation, The ELMA Foundation, Grand Challenges Ethiopia, the Maria Cecilia Souto Vidigal Foundation, the Palix Foundation, the UBS Optimus Foundation and World Vision Canada. For further information please visit: www. grandchallenges.ca/programs/ saving-brains/.

Shiffman, 2017). The field has a history of inconsistent nomenclature, variable definitions and arguably artificial dichotomies (such as health 'vs' education, development 'vs' disability, child survival 'vs' development). A key strength of the Saving Brains portfolio, reflected in qualitative feedback, was that it provided a 'common language' through training and reporting requirements. As one manager of early childhood programmes at a leading international NGO put it, 'Saving Brains really shook the field up ... helped us to speak a common language.' For example, shared knowledge around the 'human capital' agenda and rationale for investment in early childhood development was considered by a number of stakeholders as important to advocacy across sectors within their country contexts (Milner *et al.*, 2016).

However, there remained lack of clarity on some issues, with a particular challenge being a disconnect between language used by researchers and those involved in implementation. For example, researchers tend to discuss broad intervention types (for example 'parenting programmes') or specific curricula, whereas implementers are keen to talk about specific intervention components (Milner *et al.*, 2016; Britto *et al.*, 2017). As Yousafzai and Aboud have previously suggested (2014), as emphasis in policy and programming shifts there is a need for clearer definition of the 'what' and 'how' of implementation. Critical intervention components need to be described practically and with greater granularity.

Greater consensus on key definitions of both the challenge and solutions, wrapping these into clearly described 'packages' which can be adapted to context, will be important to ensure that the 'ask' for policymakers and programmers with primary responsibility for implementation is clear. The *Early Moments Matter for Every Child* report (UNICEF, 2017) and the *Nurturing Care for Early Childhood Development* framework (WHO and UNICEF, 2018) are important opportunities towards unifying our voice.

3 Improving measurement for impact and accountability

Saving Brains has contributed to recent progress in global child development metrics, including support for development of population-level measures such as the WHO-led Indicators for Infant and Young Child Development and the Caregiver Reported Early Development Index (McCoy *et al.*, 2016). However, measurement across diverse settings remains a major challenge as emphasis shifts to implementation at scale and there is a need to explore, describe and *measure the process* of implementation (Yousafzai and Aboud, 2014).

Saving Brains developed a monitoring and evaluation framework for grant recipients structured around a portfolio-level 'theory of change' which included contextual factors, inputs, outputs and outcomes in intervention implementation, and required grant recipients to track indicators. Qualitative feedback from teams was that this was important and led to consideration of factors (such as policy context) that would not otherwise have been taken into

'With the Sustainable Development Goals, there is growing attention for early childhood development and an opportunity to translate it into largescale implementation in multiple countries.' account at an early stage of implementation design. However, many challenges were also identified, including an over-reliance on parental report for measuring outcomes, inconsistent processes for the use of measurement tools across settings, limitations in the range of outcomes measured, and emphasis on short-term cross-section outcomes (Milner *et al.*, 2016). The framework did allow for early signals of potential impact that could be validated with subsequent, larger phases of support (Radner *et al.*, 2018)

Stakeholders within the Saving Brains evaluation also highlighted the importance of communicating child development outcomes in a way that is accurate yet meaningful to stakeholders who are *not* immersed in the early childhood field. Specifically, interim measures to communicate progress on the pathway towards impact were considered important, given that it takes time to measure long-term outcomes in child development. Measurements need to be both accurate and feasible at scale.



 Δ Photo: Joop Rubens/Kidogo

A growing partnership

Since the portfolio evaluation outlined in this paper, the Saving Brains partnership has grown (Saving Brains, 2018): with further investments, over 50 additional interventions are now being designed and tested. Saving Brains provides useful learnings, but no silver bullets: to improve scale-up of early childhood development interventions with impact in diverse settings requires engagement beyond traditional networks, including the non-specialist policy and programming community, as well as definition of decision points in programme design and implementation. Evidence to inform decision points is needed to guide common questions raised by those responsible for implementation including cadres, intervention content, costs and how to routinely measure coverage, quality and outcomes for improved accountability in tracking progress towards targets.

References

- Britto, P.R., Lye, S.J., Proulx, K., Yousafzai, A.K., Matthews, S.G., Vaivada, T. *et al.* (2017). Nurturing care: promoting early childhood development. *The Lancet* 389: 91–102.
- Daelmans, B., Darmstadt, G.L., Lombardi, J., Black, M.M., Britto, P.R., Lye, S. *et al.* (2017). Early childhood development: the foundation of sustainable development. *The Lancet* 389: 9–11.
- McCoy, D.C., Black, M.M., Daelmans, B. and Dua, T. (2016). Measuring child development in children from birth to age 3 at population level. *Early Childhood Matters* 125: 34–9. Available at: https://bernardvanleer.org/ecm-article/ measuring-development-children-birth-age-3population-level/ (accessed February 2018).
- Milner, K.M., Kohli-Lynch, M.K., Tann, C.J. and Lawn, J.E. on behalf of the Expert Advisory Group and Saving Brains Platform Team. (2016, unpublished). Saving Brains Portfolio Impact and Process Evaluation Report. London: School of Hygiene & Tropical Medicine.

- Radner, J.M., Ferrer, M.V.S., McMahon, D., Shankar, A.H. and Silver, K.L. (2018, in press), Practical considerations for transitioning early childhood interventions to scale: lessons from the Saving Brains portfolio. Annals of the New York Academy of Sciences.
- Richter, L.M., Daelmans, B., Lombardi, J., Heymann, J., Boo, F.L., Behrman, J.R. *et al.* (2017). Investing in the foundation of sustainable development: pathways to scale up for early childhood development. *The Lancet* 389: 103–18.
- Saving Brains. (2018). Saving Brains, Grand Challenges Canada. Available at: http://www. grandchallenges.ca/programs/saving-brains/ (accessed February 2018).
- Shawar, Y.R. and Shiffman, J. (2017). Generation of global political priority for early childhood development: the challenges of framing and governance. *The Lancet* 389: 119–24.
- Shiffman, J., Schmitz, H.P., Berlan, D., Smith, S.L., Quissell, K., Gneiting, U. et al. (2016). The emergence and effectiveness of global health networks: findings and future research. *Health Policy & Planning* 31 (Suppl. 1): i110–23.

- UNICEF. (2017). Early Moments Matter for Every Child. Available at: https://www.UNICEF.org/ media/files/UNICEF_Early_Moments_Matter_ for_Every_Child_report.pdf (accessed February 2018).
- United Nations. (2015). Sustainable Development Goals. Available at: http://www.un.org/ sustainabledevelopment/sustainabledevelopment-goals/ (accessed February 2018).
- World Health Organization and UNICEF. (2018). Nurturing Care for Early Childhood Development: A framework for linking survive and thrive to transform human health and potential. Available at: http://www.who.int/ maternal_child_adolescent/child/draft2nurturing-care-framework.pdf?ua=1 (accessed March 2018).
- Yousafzai, A.K. and Aboud, F. (2014). Review of implementation processes for integrated nutrition and psychosocial stimulation interventions. *Annals of the New York Academy* of Sciences 1308: 33–45.

Policy lessons for strengthening and supporting the early childhood workforce

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Results for Development (R4D), Washington DC, USA Despite growing momentum to promote early childhood development around the world, many countries continue to struggle with providing quality education, health, and social protection services for all young children and their families (UNESCO, 2017; UNICEF, 2017). Improving the quality of early childhood experiences depends on strengthening the skills, professional development, and employment conditions of those who work with young children. Yet often early childhood workers are undervalued, underpaid, and inadequately prepared (Urban *et al.*, 2011; International Labour Organization (ILO), 2012; Neuman *et al.*, 2015). This raises a number of questions about how to effectively support early childhood workers: what do early childhood professionals and paraprofessionals need to know and be able to do in order to succeed in their roles? What motivates members of the early childhood workforce in their day-to-day work? What policies are needed to support a qualified, stable workforce at scale?

To address these questions, the Early Childhood Workforce Initiative (ECWI) recently carried out three in-depth country studies of the early childhood workforce in Peru, South Africa, and Ukraine.¹ ECWI is a global, multi-stakeholder effort co-chaired by R4D and the International Step by Step Associaton (ISSA) to promote high-quality, equitable services through a focus on those who work with families and young children, as well as those who supervise and mentor practitioners. ECWI supports rigorous analytical work, the development of new tools and resources, robust communication efforts to share best practices through an online knowledge hub and webinars, and learning activities among policymakers, practitioners and scholars, with an emphasis on both South–South and North–South exchange.²

The studies shed light on the challenges affecting the quality and supply of the early childhood workforce and identify recommendations to overcome these bottlenecks in each country. Each country study focused on specific members of the early childhood workforce who support young children and their families. We studied the Cuna Más home visiting programme in Peru (Josephson *et al.*, 2017), the First 1000 Days health services in South Africa (Hatipoğlu, 2018), and preschool programmes in Ukraine (Putcha *et al.*, 2018). In each country, the research teams carried out key informant interviews and focus groups with a mix of early childhood practitioners, parents, local and national policymakers, and representatives of training and professional organisations, and then

- 1 These country studies were led by Kimberly Josephson, Kavita Hatipoğlu and Vidya Putcha. We gratefully acknowledge the thoughtful contributions of these three R4D colleagues to this article.
- 2 For more information about the Early Childhood Workforce Initiative, please visit: http://www. earlychildhoodworkforce.org.

analysed these data using qualitative methods. Where feasible, cost data were incorporated into the analysis. Together, these three studies offer a set of cross-country lessons to inform efforts to improve policies for the early childhood workforce in diverse contexts.

The roles and responsibilities of the early childhood workers in each country we studied are quite different – as are the settings in which they work. They vary in terms of the target age group served, whether they work in homes, centres or schools, the degree of formality of their role, and the types of services delivered. For example, in Peru home visitors in the Cuna Más programme are locally recruited volunteers who travel to homes in rural areas facilitating non-formal, developmental activities with children under age 3, whereas kindergarten teachers in Ukraine are highly trained professionals working within an established, publicly funded national early education system. In South Africa, the roles of community health workers (CHWs) are evolving with the goal of implementing the First 1000 Days services by integrating parenting and early stimulation messages into their existing maternal and child health tasks.

Despite these differences, the early childhood workers we studied in these three countries share several challenges:

1 Expanding roles and responsibilities

As frontline early childhood workers take on important new responsibilities to promote child development, they need new forms of support and guidance.

In all three countries, the roles of those who work with young children are expanding and their responsibilities are becoming more complex. In South Africa, for example, CHWs are required to know about and cover topics ranging from prenatal and newborn care to the management of chronic diseases. As part of the emphasis on the first 1000 days, the recently introduced National Integrated Early Childhood Development Policy calls for the integration of early stimulation messages and activities into home and community visits with families (Republic of South Africa, 2015). Questions have emerged about how best to ensure that CHWs have the skills and support to effectively carry out these additional tasks, including how to expand their focus from providing health and growth monitoring services to include 'nurturing care'³. In Ukraine, a recent policy shift toward the inclusion of children with special education needs within mainstream kindergartens has been challenging for teachers to do well without relevant in-service training or sufficient numbers of teaching assistants. In both Peru and Ukraine, early childhood workers identified engaging and communicating with parents as an area where they needed more training and guidance to carry out their work effectively.

'ECWI promotes high-quality, equitable services through a focus on those who work with families and young children, as well as those who supervise and mentor practitioners.'

³ Using existing health platforms to promote child development is supported by recent research reviews including Britto *et al.* (2017).

2 More practical ongoing training and supervision needed

Improving access to and relevance of training for frontline early childhood workers is inadequate without attention to their supervisors and mentors.

Frontline workers learn best when training is practical, hands-on, and reinforced on a regular basis (Mitter and Putcha, 2018). In Ukraine, where preschool teachers have regular access to in-service training every five years, we learned that while these sessions are often lecture-based, teachers are much more interested in opportunities to learn from their peers. In South Africa, where CHWs have varied levels of formal education, training material needs to be more practical and less theoretical. In addition to better access



△ Photo: Cuna Más programme/cunamas.gob.pe

to relevant training, to be effective early childhood practitioners, frontline workers benefit from regular, effective support from supervisors and mentors in the field. Ongoing support, including supportive supervision, coaching, and mentoring, is particularly important for paraprofessionals, who may have limited education and initial preparation (Mitter and Putcha, 2018). Yet, it is common for supervisors and managers to focus more on compliance than on supporting and coaching frontline workers. In Ukraine, methodologists experienced teachers who provide regular classroom guidance and support to more novice teachers – are well positioned to provide pedagogical guidance on a range of topics, including working with children with special needs, but they too need access to updated information and training. As one teacher trainer noted, 'In a year, even in half a year, everything seen or heard by the preschool teacher in the room becomes already old-fashioned. It's like a cell phone.' Peru offers a potential model. Home visitors in our study expressed their appreciation for the rich content and engaging delivery of training sessions, as well as the focus on continuous support and supervision they received from regional staff. Regional supervisors accompany home visitors on two visits each month to observe their work, discuss any challenges, and provide feedback and guidance.

3 Challenging day-to-day working conditions

Although early childhood workers expressed strong intrinsic motivation to do their jobs, they face challenging day-to-day working conditions.

Early childhood workers view themselves as positive change agents and see value and direct impact from their work in fostering the health and development of young children and families. While workers are motivated by factors other than compensation, care must be taken not to exploit this motivation. Across all three countries, low pay, heavy workloads (for example, large caseloads for community workers in Peru and South Africa and large class sizes in Ukraine), and challenging working conditions (such as short contracts, extensive travel, safety concerns, non-traditional working hours) affect workers' morale and their ability to carry out their responsibilities effectively. Community workers in Peru and South Africa cited additional day-to-day challenges, such as insufficient and/or inadequate materials (for example uniforms, kits) and resources (inadequate cell phone and transportation allowances), whereas kindergarten teachers in Ukraine expressed concerns about the burden of excessive paperwork. In Peru, home visitors struggle to balance their Cuna Más role, for which they receive only a small stipend, with the need to earn other income and meet their family responsibilities; several respondents cited increasing turnover rates as a result. As one home visitor asserted, 'The stipend is very little ... the ten hours they tell you ... we don't work ten. If they added a little more [to our stipend], we wouldn't look for other options.' Depending on the challenge, differing levels of financial investment are needed (for example, wage increases tend to be more costly than investment in new materials). However, improving day-to-

'Frontline workers learn best when training is practical, hands-on, and reinforced on a regular basis.' day working conditions as well as addressing remuneration and status of the profession would probably boost staff morale and improve the quality of early childhood development programmes (OECD, 2012; Eurofound, 2015).

4 Limited career pathways

Limited career pathways constrain recruitment and continuous quality improvement of the workforce.

Across the three countries, additional training and experience are not clearly linked with remuneration increases or opportunities for career advancement. Along with low pay and status, limited career pathways have led to problems in recruiting and retaining qualified workers. In Ukraine, for example, it is difficult to recruit qualified candidates to teach in preschool, particularly in urban areas where there are more attractive, better-paid employment alternatives. A substantial number of trained preschool teachers choose not to enter the field at all after graduating. Despite the existence of pathways for teachers and support staff to advance within the preschool education system, in practice there are few opportunities for career progression. Although some home visitors in Peru expressed the view that they were growing both personally and professionally just by working with the programme, there are typically few incentives (such as opportunities to advance and become professional programme staff) for community workers to invest in improving their skills over time. Building career pathways that are linked to both financial and non-financial recognition is important for recruitment, retention, and continuous quality improvement of the workforce (Mitter and Putcha, 2018).

Addressing the challenges

As more and more countries seek to expand and improve early childhood services, the essential role of the workforce can no longer be overlooked. These four workforce issues may seem daunting to address, especially given that policymakers are often working within constrained budget envelopes. While each of these areas is important for ensuring a strong and supported workforce, individual countries will need to make difficult decisions in determining which ones to prioritise.

Fortunately, additional investments in training, better compensation, and ongoing support are expected to create some efficiencies by reducing turnover and the loss of trained workers who leave (or never enter) the field. At the same time, well-compensated and motivated workers are more likely to foster stable, positive relationships with young children that are critical to promoting healthy early development and learning. 'Early childhood workers view themselves as positive change agents and see value and direct impact from their work in fostering the health and development of young children and families.'

References .

- Britto, P.R., Lye, S.J., Proulx, K., Yousafzai, A.K., Matthews, S.G., Vaivada, T. *et al.* (2017). Nurturing care: promoting early childhood development. *The Lancet* 389(10064): 91–102.
- Eurofound. (2015). Working conditions, training of early childhood care workers and quality of services: a systematic review. Luxembourg: Publications Office of the European Union.
- International Labour Organization (ILO). (2012). Right Beginnings: Early childhood education and educators, Report for discussion at the Global Dialogues Forum on Conditions of Personnel in Early Childhood Education, Geneva, February 2012. Geneva: ILO.
- Hatipoğlu, K. (2018). Supporting the Early Childhood Workforce at Scale: Community health workers in South Africa. Washington DC: Results for Development.
- Josephson, K., Guerrero, G. and Coddington, C. (2017). Supporting the Early Childhood Workforce at Scale: The Cuna Más home visiting program in Peru. Washington DC: Results for Development. Available at: http://www.r4d.org/ wp-content/uploads/Full-report-Cuna-Mascountry-study.pdf (accessed March 2018).
- Mitter, R. and Putcha, V. (2018). Strengthening and Supporting the Early Childhood Workforce: Training and professional development. Washington DC: Results for Development. Available at: http://www. earlychildhoodworkforce.org/node/309 (accessed March 2018).
- Neuman, M.J., Josephson, K. and Chua, P.G. (2015). A Review of the Literature: Early childhood care and education (ECCE) personnel in low- and middle-income countries. Early Childhood Care and Education Working Paper Series 4. Paris: UNESCO. Available at: http://unesdoc. unesco.org/images/0023/002349/234988E.pdf (accessed March 2018).

- OECD. (2012). Starting Strong III: A quality toolbox for early childhood education and care. Paris: OECD.
- Republic of South Africa. (2015). *National integrated early childhood development policy*. Pretoria: Government Printers.
- Putcha, V. Neuman, M., Zaplotynska, O. and Sofiy, N. (2018). Supporting the Early Childhood Workforce at Scale: Preschool education in Ukraine. Washington DC: Results for Development.
- UNESCO. (2017). Accountability in Education: Meeting our commitments. Global Education Monitoring Report. Paris: UNESCO.
- UNICEF. (2017). Early Moments Matter for Every Child. New York: UNICEF.
- Urban, M., Vandenbroeck, M., Peeters, J., Lazzari, A. and Van Laere, K. (2011). CoRe: Competence requirements in early childhood education and care. Brussels: European Commission, DG Education and Culture.

Building country ownership and investments through the Global Partnership for Education

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Early Childhood Education Specialist, Global Partnership for Education, Washington DC, USA The Global Partnership for Education (GPE) is a multi-stakeholder partnership and funding platform which is building country ownership and investments in early childhood education and care through sector planning, policy dialogue and financing. Since 2003, it has provided grants totalling USD 4.7 billion to support basic education in 65 developing countries. This includes over USD 180 million to support early childhood services through implementation grants: an initial analysis of 21 active grants shows that most are being used to improve the teaching workforce, construct classrooms or provide additional learning materials, and strengthen systems.

GPE's Strategic Plan for 2016–2020 includes a focus on young children. Two of the indicators on which it monitors progress annually align with Sustainable Development Goal 4.2. These are: 'children under 5 years developmentally on track in health, learning, and psychosocial wellbeing' and 'increased pre-primary enrollment' (GPE, 2016: 11–12). While data are available only for 22 countries, collected between 2011 and 2014, it shows that approximately two-thirds of children aged between 3 and 5 are developmentally on track, but fewer than one-third have access to pre-primary programmes – less than a quarter in countries affected by fragility and/or conflict (GPE, 2017).

GPE's unique country-level operating model funds the development of education sector plans (ESPs) through a process led by government with a formal mechanism to ensure accountability with other stakeholders. A recent review of 47 active ESPs shows there is scope to raise the quality of early childhood within these plans by improving country analysis and planning capacity for scaling quality programmes, with an increased focus on reaching the most vulnerable children. While nearly 90% of reviewed ESPs provide information on access and coverage, only half break this down by geography, gender or socioeconomic status. Fewer than one-fifth include data on qualifications or competences of teachers in the early childhood sector. Just under half have a multi-year action plan for early childhood; about two-thirds include specific cost projections, but only six include an analysis of past and potential external funding and only two identify funding gaps.



△ Photo: Chantal Rigaud/GPE

In a recent survey of 40 GPE partner countries, only half strongly believed that their leadership is committed and convinced that investments in early childhood should be prioritised within the education sector budget. The top two reported that bottlenecks were financing and coordination across ministries and partners. The same survey showed there is high interest in learning about other countries' models in early childhood provision – including parental education programmes, accelerated school readiness programmes and home-based programmes – and strong demand for better data analysis and planning.

In 2018, GPE is launching two initiatives. First, the Better Early Learning and Development at Scale (BELDS) funding mechanism¹ will support pilots in capacity development, integrating existing effective approaches, tools and models into national planning and policy implementation cycles. These pilots will inform the creation of a toolkit for other countries to learn from. Second, GPE will launch a Knowledge and Innovation Exchange, to inform both practice and policy advocacy.² Both initiatives will build global knowledge and good practice in bringing quality early childhood services to scale within national education systems, particularly in developing countries.

References

Global Partnership for Education. (2016). *The Global Partnership for Education Strategic Plan* 2016–2020. Washington DC: GPE. Global Partnership for Education. (2017). GPE Results Report 2015/16. Washington DC: GPE.

- 1 BELDS is funded by Comic Relief, Conrad Hilton Foundation, Dubai Cares, Open Society Foundation.
- Readers are invited to monitor www.globalpartnership.org for more information on both initiatives.

INNOVATION

Supporting refugee, internally displaced and marginalised host community parents in the Arab region

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- 1 The Arab Resource Collective (ARC) is a regional non-governmental organisation registered legally in Lebanon for better childhood, health for all, and community development. The Bernard van Leer Foundation and Save The Children (UK) were especially important in funding its early work on child development. Further information is available online at: http://www.mawared.org/.
- 2 Adults and Children Learning: A holistic and integrated approach to early childhood care and development (Sfeir et al., 2002), a working manual in three volumes: Volume 1: Concepts and Principles, Volume 2: Activities and Exercises Volume 3: Readings. It was published by ARC and Save the Children Fund (UK) with the support of the Bernard van Leer Foundation and The Community Fund – the National Lottery Charities Board.

Recent upheavals in the Arab region, particularly the war in Syria, have led to millions of people taking refuge in neighbouring countries or being displaced within their own countries. The humanitarian approach prioritises urgent needs such as shelter, food and medical services; beyond these, families typically have no sustained support to provide appropriate care for their young children. To address this gap, the Health, Early learning and Protection Parenting Programme (HEPPP) is to be scaled up following an evaluation of a recent pilot in Lebanon and Jordan.

The history of HEPPP's development starts with years of work by the Arab Resource Collective (ARC)¹ on the concepts and principles of early childhood development, and good practices such as inclusion and the role of play in learning. Over the three decades since it was founded, ARC has succeeded in assimilating into the Arabic discourse a holistic and integrated approach to early childhood. ARC now hosts the Arab Network for Early Child Development (ANECD), with members including government ministerial officials, academics, NGOs, experts and practitioners from across the region.

'Holistic' means considering the child as a unified entity, and 'integrated' means addressing children's needs in a coherent way. ARC's holistic and integrated approach is based on principles of child ecology, developmental psychology and children's rights, including that the child's physical, emotional, cognitive, social and other capacities develop as an interrelated whole; that childhood is a complete phase of development by itself; and that development takes place in a well-known sequence, though its pace varies from one child to another.

The holistic and integrated approach was distilled in *Adults and Children Learning*², a manual published in Arabic in 2002. In the following years, ARC's early childhood development programme moved on to develop further training resources in Arabic for parents and early childhood workers, either translated and adapted or produced by local teams of professionals, involving pilots through direct implementation in capacity-building projects with the targeted beneficiaries.

HEPPP: approaching fathers and mothers together

Developed by a team of early childhood experts, academics and practitioners from Egypt, Palestine and Lebanon, HEPPP was first piloted in community centres in Lebanon and Egypt between 2012 and 2014. Fathers and mothers

followed the training together, as a family unit with their children. Participating parents were divided in two groups according to the age of their children, one group for pregnancy to age 3 and the other for age 4–6.

The pilot consisted of a structured set of 15 weekly interactive training sessions, lasting two to three hours each, on the subjects of pregnancy; breastfeeding; balanced nutrition; nutritional problems and indicators; personal hygiene, including toilet training; safety and accidents; immunisations, infections and disease; equity and inclusion; communication between parents; communication with peers; reinforcing positive behaviour; 'every child has intelligence – what is your child's?'; play; critical thinking, learning and inquiry-based skills; and nursery, kindergarten and school readiness.

Together, these sessions provide a framework of concepts, skills and exercises to enhance parents' knowledge about the importance of the early years; nurture a holistic and inclusive approach towards raising children; encourage respect for children's diverse potential, skills and pace of development; develop good practice in health, nutrition, early learning and risk management; promote positive caregiving practices, minimise stress and avoid violence; improve the community's impact on children's health, education and safety; and build parents' capacity to become role models and support other parents.

HEPPP is innovative in the Arab region because:

- it adopts a holistic, integrated and inclusive approach covering health, nutrition, early learning, social welfare and physical protection in a coherent and interactive way
- it addresses the continuum of the child's age from before birth to 6 years
- it deals with the challenges of engaging fathers and mothers as couples together as the primary caregivers and educators
- it integrates the strategic objectives of early detection, early intervention and early stimulation.

Part of the plan is to scale-up the implementation with a parent-to-parent approach by engaging selected graduate couples (to be called *sanad*³) into paid work, after providing them with additional training on facilitation, thus giving them a sense of worth as well as a modest income. In this way the numbers of beneficiaries will increase and the unit cost will decrease exponentially after several rounds of implementation.

Lessons learned from weekly experiences and discussions with parents participating in the pilot were complemented by a study which evaluated HEPPP's effectiveness using pre- and post-implementation questionnaires, focus groups with parents, and reports submitted by the trainers. The evaluation found a clear impact on participants' knowledge, practices and attitudes in most topics, and identified various ways to improve the programme. These included in each session an initial group discussion with all parents before dividing them into two working groups according to their children's age, and 'ARC has succeeded in assimilating into the Arabic discourse a holistic and integrated approach to early childhood.'

3 *Sanad* is an Arabic term that translates as 'sustainer'.

making sure each group had one male and one female trainer, to model gender equity to the couples participating.

Adaptation for working with refugee families

In the meantime, the developing refugee crisis in the region made clear the need to adapt HEPPP also for parents who are refugees, internally displaced or vulnerable people in host communities. In collaboration with partners⁴, ARC added five more sessions to integrate an element of psychosocial care and support for the caregivers, covering mental health and well-being; depression; grief; psychosomatic disorders; and violence.

Another change to reflect operating in the refugee context was opening the programme to single parents and extended family members acting as caregivers. When both fathers and mothers were available, engaging them equally as couples was a challenge given the dominant culture, yet it is proving to be feasible and to enhance positive patterns in responsive parenting as well as gender equity practices.

The first round of implementation with refugee families was carried out between 2016 and 2018 in Lebanon (working with two NGOs, the Women Programs Association and Baraeem (Buds) Association) and Jordan (with Plan International). It involved Syrian and Palestinian refugees from Syria and parents from underprivileged Lebanese and Jordanian host communities, who are being made increasingly vulnerable by the influx of refugees.

4 These include the Bernard van Leer Foundation, the Open Society Foundation and Plan International.



 Δ Photo: Arab Resource Collective

In total, 110 parents were trained during the first phase of the programme: 70 across four groups in two centres in Lebanon, and 40 in Jordan across two groups in one centre. Of these, 12 graduate parents were then selected to become *sanads* – eight in Lebanon and four in Jordan – and were given training on basic facilitation skills. In a second phase, they trained 120 new participants using a parent-to-parent approach.

An evaluation of both phases has been carried out, consisting of three parts. First, a questionnaire with parents to gather quantitative data on four variables: parents' recent mental health state (as measured by the World Health Organization's WHO-5 Wellbeing Index); their levels of stress (using the PSI – Parental Stress Index); the disciplinary style they adopt with their child (DSQ – Disciplinary Style Questionnaire); and the child's emotional and behavioural conduct (SDQ – Socio-Emotional Status: Strengths and Difficulties Questionnaire). Second, two focus group discussions (pre-implementation and post-implementation) were conducted with parents to obtain more in-depth qualitative data about changes in their knowledge and practice.

Finally, to control for potential differences in variables across groups, a 'fidelity rating' explored whether the same key messages of the project were being given to all the trainees in the same way. Overall, the evaluation tests the effectiveness of the HEPPP approach by measuring the impact on different aspects of participating parents' knowledge, attitudes and practices. At the time of writing, the data are being compiled and prepared for analysis.

Future plans

According to the results of the evaluation, ARC's team will re-visit HEPPP to identify areas for improvement in terms of programme content, methodology and methods of delivery. ARC will also consider how to refine research tools – for example, to enable separate quantitative evaluation of mothers and fathers, more quantitative evaluation of child development using ASQs, and evaluation of retention rate.

Nonetheless, the value of the programme is already sufficiently clear that more donor agencies have stepped forward to support ARC to implement HEPPP on a larger scale. ANECD will serve as a perfect vehicle to promote scaling-up among more Arab countries, reaching refugees in new sites and developing a critical mass of families engaged with the HEPPP approach.

Reference

Sfeir, J., Gilkes, J., Espanioly, N., Nabhan, S., Saheli, R., Srouji, M., Bibi, G. and Hajjar, Y. (2002). Adults and Children Learning: A holistic and integrated approach to early childhood care and development. Beirut: ARC and Save the Children Fund (UK). 'To adapt the Health, Early learning and Protection Parenting Programme for parents who are refugees, we added sessions to integrate psychosocial care and support for caregivers.'

Training caregivers to transform children's lives

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1 Disclaimer: The authors alone are responsible for the views expressed in this article and these views do not necessarily represent the decisions, policy, or views of the universities with which the authors are associated, the World Health Organization, or any of the funders. Childhood developmental disorders and disabilities are a growing challenge to healthcare systems around the globe: the majority of children with developmental disorders do not have access to care. While obtaining accurate prevalence estimates is a complex task, the global burden of disease for these conditions is thought to be significant and is predicted to gradually increase (Whiteford *et al.*, 2013), as the population of children continues to rise.

The World Health Organization's (WHO) Global Strategy for Women's, Children's and Adolescents' Health calls for the provision of nurturing care to all children. This means a stable, protective and emotionally supportive environment set up by parents and other caregivers that promotes the child's good health and learning. Given the additional challenges that they experience, parents of children with developmental disorders or delays should be specifically supported in providing nurturing care within a 'whole family' approach.

There is now convincing evidence that parents can learn skills to promote their children's development; hence comprehensive caregiver skills training is being recommended for families of children with developmental delays by the WHO in the *mhGAP Intervention Guide* (WHO, 2016). Given that no existing training programme was freely available and feasible in low-resource settings, the WHO, along with international partners, began the development of a novel, open-access programme for families of children with developmental disorders or delays, which could be implemented in low-resource settings by non-specialists.

Developing the WHO Caregiver Skills Training programme

To inform the development of the Caregiver Skills Training (CST) programme, evidence reviews, meta-analyses and expert consultations were conducted. The systematic review was designed to allow the identification of the 'active ingredients' of successful interventions, and used statistical analyses to identify common elements of effective programmes (Reichow *et al.*, 2013; Reichow *et al.*, 2014).

It showed that caregiver-mediated interventions can be effectively delivered by non-specialists in community settings, and even low-intensity programmes lead to improved child developmental and behavioural outcomes as well as improved family well-being. It also emerged that programmes that included behaviour management techniques and instruction on the use of cognitive intervention strategies to improve caregiver coping were more effective than programmes without this content. Additionally, programmes that used a combined delivery format of group and individual sessions showed a greater impact in the reduction of problem behaviour.

Experts from diverse professional and cultural backgrounds, including caregivers of children with developmental delays and disorders, were consulted in a meeting, hosted by the WHO and remotely, in order to define the content and structure of the intervention and identify capacity-building strategies. Issues discussed included the selection of inclusion and exclusion criteria for children and families who would receive the intervention, programme content, delivery methods (for example, individual or group delivery), and the optimal intensity of the programme in terms of the number and duration of sessions. A flexible, individualised approach suitable for the heterogeneous needs of families that builds on a family's strengths and promotes the involvement of other family members was chosen to increase retention and reduce drop-out.

Design of the WHO CST programme

Based on the evidence reviewed and experts' guidance, a programme was developed comprising intervention manuals, participant booklets, adaptation, capacity building and monitoring and evaluation tools and methods.²

2 For further information on the WHO CST programme and children's mental health issues please visit: http://www.who.int/ mental_health/maternal-child/PST/ en/



The programme uses a family-centred approach that is designed to be delivered as part of a network of health and social services for children and families. The programme structure and content have been designed to be adapted and it has the flexibility to incorporate the characteristics of local health and educational systems and in different cultural settings.

The engagement of families and communities was considered paramount to make caregivers' attendance and participation in the programme feasible. It was proposed that the programme should be organised in a modular way, with 'core' individual and group sessions followed by additional optional sessions, according to specific needs and availability of resources. The WHO CST programme addresses the challenge of the heterogeneous needs of children and families first by defining individualised intervention targets, taking into account the child's developmental level and the family's priorities. Secondly, one-to-one tailored coaching is provided to the caregivers during group sessions and home visits. Lastly, optional modules and add-ons to the core sessions are available to ensure that additional medical conditions and other co-occurring needs are addressed. Considering the complex nature of such tasks, continuous support and supervision were included to effectively support the implementation of CST by non-specialist providers.

The WHO CST intervention was designed to target:

- the **child's functioning**, by developing communication, social and adaptive skills and reducing disruptive and challenging behaviour
- the caregiver's role and functioning, by promoting self-confidence, parenting skills and knowledge as well as coping skills and psychological well-being
- the caregiver-child relationship
- the caregiver and child's participation and inclusion in community events.

The WHO CST consists of nine group sessions and three individual home visits, focused on training the caregiver on how to use everyday play and home activities and routines as opportunities for learning and development. The sessions specifically address communication, engagement, daily living skills, challenging behaviour and caregiver coping strategies. Additional, booster modules on caregiver well-being and for minimally verbal children are available. During the group sessions, facilitators illustrate evidence-based psycho-educational strategies derived by principles of applied behaviour analysis, developmental science, social communication interventions, positive parenting and self-care methods through group discussions, demonstrations and guided role play. One-to-one facilitator-to-caregiver coaching is provided during the home visits (prior to the first group session, midway and at the end of the programme), with the purpose of tailoring the intervention to the families' individual environments, goals and needs.

In order to be scalable and sustainable, the WHO CST was designed to be implemented by a range of non-specialist providers (such as nurses, community

'Parents of children with developmental disorders or delays should be specifically supported in providing nurturing care within a "whole family" approach.' health workers, peer caregivers) at health facility level, at community level, or in schools. It should be delivered as part of a network of community-based services, within a stepped-care model. A cascade model, for training specialist Master Trainers responsible for the training and supervision of facilitators, was developed and in December 2015 the programme was made available for field testing for the first time.

Field testing and the way forward

The WHO CST programme is currently undergoing field testing in more than 30 countries in regions throughout the world, including high-, low- and middleincome countries. Two randomised controlled trials are underway in Pakistan and Italy, and future trials are planned in China, Ethiopia and Kenya; the WHO CST is being tested using a variety of delivery approaches, including the use of peer facilitators and tablet-based support. In December 2017 an International Technical Consultation with researchers and representatives of governments and civil society organisations from 14 countries was hosted in China, with the goal of facilitating knowledge exchange on the adaptation and implementation of CST among sites at different stages of field testing.

With previous research highlighting the effectiveness of caregiver-mediated interventions and preliminary evidence of good acceptability and feasibility of the WHO CST programme in communities worldwide, the programme is working towards the goal of closing the gap in access to care for children with developmental disorders and delays, ultimately aiming to help them reach their optimal developmental potential.

Acknowledgment

The development of CST materials and the coordination of CST field testing are being supported by Autism Speaks.

References _

 Reichow, B., Kogan, C., Barbui, C., Smith, I., Yasamy, M. T. and Servili, C. (2014). Parent skills training for parents of children or adults with developmental disorders: systematic review and meta-analysis protocol. <i>BMJ Open</i> 4(8): e005799. Reichow, B., Servili, C., Yasamy, M. T., Barbui, C. and Saxena, S. (2013). Non-specialist psychosocial interventions for children and adolescents with intellectual disability or lower-functioning autism spectrum disorders: a systematic review. <i>PLoS</i> 	 Whiteford, H.A., Degenhardt, L., Rehm, J., Baxter, A.J., Ferrari, A.J., Erskine <i>et al.</i> (2013). Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010. <i>The Lancet</i> 382(9904): 1575–86. World Health Organization. (2016). <i>mhGAP</i> <i>Intervention Guide for Mental, Neurological and</i> <i>Substance Use Disorders in Non-specialized</i> <i>Health Settings</i>. Geneva: WHO.
Med, 10(12): e1001572.	Health Settings. Geneva: WHO.

Using technology to train health workers to treat maternal depression at scale: a new model from Pakistan

Shamsa Zafar

Professor of Obstetrics and Gynaecology, Fazaia Medical College, Air University, and Senior Scientist, Human Development Research Foundation, Islamabad, Pakistan¹ Maternal psychosocial well-being is important for early child development. In countries where maternal depression is high and there is a lack of mental health specialists, community health workers can be trained and supervised to treat depression. However, training and supervision at scale can be a challenge. We recently studied the potential for the Thinking Healthy Program (THP) in Pakistan to make greater use of technology to train and supervise health workers, with promising results showing the potential to help similar programmes to scale in other countries.

The association between maternal depression and adverse child outcomes is well established (Herba *et al.*, 2016). Mechanisms include altered placental function; self-neglect among depressed mothers, leading to infection and dietary deficiencies in mother and child; and less-than-optimal mother-child interactions hampering the nurturing and care of a child after birth. The economic burden includes not only the cost of treating the mother's depression, but costs associated with complications such as preterm birth and low birthweight.

In low- and middle-income countries, the prevalence of maternal depression is often much too high for the limited number of specialists to treat effectively. Evidence shows that interventions to treat maternal depression can be delivered through community health workers: THP, which is based on cognitive behavioural therapy, has a proven impact on maternal depression (Rahman *et al.*, 2008). It has been adopted by the World Health Organization for global dissemination through its mhGAP programme.

However, there are major issues in scaling-up the coverage of such interventions, including human resources, cost, quality and equity. The foremost challenge, especially where health systems are weak, is how a small number of mental health specialists can provide quality training and supervision to health workers at scale. Pakistan's Lady Health Worker (LHW) Programme covers 85% of Pakistan's rural population through 115,000 LHWs. A technological solution to their training and supervision would provide treatment to an estimated 5 million women suffering from maternal depression in rural Pakistan.

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△ Illustration: Thinking Healthy Program materials

Technology-assisted cascade training and supervision

The Human Development Research Foundation developed a technologyassisted cascade training and supervision system and tested it in a randomised controlled trial in the post-conflict rural area of Swat (Zafar *et al.*, 2016). We chose this area because its health system is weak and fragile after multiple humanitarian crises, including military operations in 2009 and floods in 2010.

One group of LHWs, the control group, was trained directly by specialists. The other group was trained by supervisors who had been trained by specialists, using a tablet-based multimedia manual. In each case, the training was for five days and covered principles such as engagement with the family of the depressed mother, use of counselling skills, guided discovery (a way of probing the mother's beliefs), and setting tasks.

To create the tablet-based multimedia manual, the original THP intervention material was converted to narrative scripts; images of real-life characters depicting trainer and trainee were developed by a graphic designer, and voice-overs were used for each character. Scenarios and role plays were added, for example on dealing with challenging situations and adverse events. Trainers could pause these and follow instructions to make their sessions more interactive. The software included a supervision module to enable the training scenarios to be updated with learning from experience. In the control group, LHWs were supervised directly by specialists in monthly routine sessions at the Basic Health Unit. In the intervention group, they were supervised by supervisors, who in turn were supervised by the specialists.

When we compared the competence of the LHWs who were trained by specialists and the LHWs who were trained by supervisors assisted by technology, we found no difference in their skills, either immediately after training or while delivering interventions in the household three months later. We also found that being trained by supervisors using technology was acceptable to the LHWs. As this methodology reduces costs by approximately 30%, and enables a small group of specialists to indirectly train and supervise much larger numbers of community health workers, it has significant potential to increase the feasibility of scaling-up similar programmes.

Other uses of technology

We also developed an interactive voice response system to screen for maternal depression: we developed flyers inviting mothers to call a telephone number, where an automated system would ask the two Whooley questions. This is a standard tool for screening for depression, which involves asking: 'During the last month, have you often been bothered by feeling down, depressed or hopeless?'; and 'During the last month, have you often been bothered by little interest or pleasure in doing things?' to identify mothers who may require further evaluation in person by a health worker.

Unfortunately, we were not able to study this system in Swat due to restrictions on the use of communications at the time of the study. We now plan to trial it separately, as we hypothesise that it would be an effective way of reaching mothers with depression in conflict areas where routine visits by LHWs are not feasible. It could benefit, in particular, large parts of the world's population affected by humanitarian crises.

We have also conducted qualititative evaluations of a few instances in which LHWs used a tablet as part of their interactions with mothers. Initial indications are that both the LHWs and the mothers found the use of technology to be acceptable and feasible. It merits further research as another potential way to use technology to increase the quality and reach of services to treat maternal depression – an area in which, in general, more research is needed.²

2 Interested readers may wish to visit the website of the Mental Health Innovation Network (MHIN) for other innovations in mental health treatment: http://www.mhinnovation.net/

References

- Herba, C.M., Glover, V., Ramchandani, P.G. and Rondon, M.B. (2016). Maternal depression and mental health in early childhood: an examination of underlying mechanisms in low-income and middle-income countries. *Lancet Psychiatry* 3(10): 983–92.
- Rahman, A., Malik, A., Sikander, S., Roberts, C. and Creed, F. (2008). Cognitive behaviour therapybased intervention by community health workers for mothers with depression and their infants in rural Pakistan: a cluster-randomised controlled trial. *The Lancet* 372(9642): 902–9.
- Zafar, S., Sikander, S., Hamdani, S.U., Atif, N., Akhtar, P., Nazir, H. et al. (2016). The effectiveness of Technology-assisted Cascade Training and Supervision of community health workers in delivering the Thinking Healthy Program for perinatal depression in a post-conflict area of Pakistan – study protocol for a randomized controlled trial. *Trials* 17: 188.

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A Better Start: tackling inequity through community-wide action on early childhood development

Chris Cuthbert

Director of Research, Lumos Foundation, London, UK¹ Developmental scientist Clyde Hertzman famously documented how 'social environments and experiences get under the skin early in life in ways that affect the course of human development' (Hertzman and Boyce, 2010). Even in high-income countries, inequalities emerge early and have lifelong consequences. A boy born in the northern English seaside resort of Blackpool, for example, can on average expect to live until age 74.7, whereas a boy born in Kensington and Chelsea, one of London's wealthiest boroughs, will live until 83.3

A Better Start (ABS) is a ten-year £215-million investment by the National Lottery into five economically disadvantaged communities in England – Blackpool, Bradford, Lambeth, Nottingham and Southend. Launched in 2014, A Better Start provides support to families from pregnancy until a child's fourth birthday, focused on improving early childhood development outcomes, encompassing language and communication, diet and nutrition, and social and emotional development.

A key driver for A Better Start was the WHO Commission on the Social Determinants of Health (2008). The Commission recognised pregnancy and early childhood as crucial windows of opportunity and made 'giving children the best possible start in life' a priority for tackling inequality. And that is precisely what the five pioneering A Better Start communities have set out to do.

Each ABS local programme is distinctive, reflecting unique local contexts and patterns of need. Nevertheless, there are a number of common features of the ABS approach which are outlined below.

Place-based and child-centred

Each area has developed its own local strategy, tailored to its unique context. ABS partnerships have made a decisive shift from a past when they tried to fix individual social problems one by one, sticking plaster by sticking plaster. Instead, they are designing whole systems of support, bringing together health, education, police, voluntary, community and private sectors, all to work together with the shared goal of improving early childhood development. It is an approach that puts local people in the lead, harnessing local assets and resources and always keeping child outcomes at the centre.

1 Formerly Director of Development for A Better Start, Big Lottery Fund, London, UK



△ Photo: A Better Start: Lambeth Early Action Partnership

Shared vision and strategy

The process of developing local strategies in A Better Start began with building a shared understanding of the issues and challenges each local area faced. All stakeholders – local parents, voluntary and community organisations, local government, health agencies, researchers – shared their experiences and stories together; they looked at the data; they mapped what was good about the local areas and local services; and they identified what needed to change. It was only through building this common understanding, and taking the time to develop a shared vision, that the partnerships were able to build solid plans and consensus for change. Nurturing trusting relationships and the spirit of collaboration was vital.

Shared accountability

A Better Start has created new formal partnership structures to drive forward the vision and coordinate service delivery. The partnerships are each led by a voluntary sector organisation and have very senior-level representation on their Boards from public agencies, including local government, health and police. And crucially, the partnerships are building stronger community voice into their governance structures. In Bradford, a local parent chairs the Board responsible for their multi-million-pound grant; in Nottingham they have stipulated a minimum quota for community representation; and in Blackpool they have established new parent forums in each local children's centre.

Prevention

A Better Start marks a decisive shift away from crisis intervention: towards an approach centred on prevention and early intervention. This includes primary prevention activities such as a community-wide campaign to enhance understanding about children's early social, emotional and language development and to promote appropriate care-giving behaviours. Early intervention involves harnessing opportunities for universal services such as midwifery and health visiting to proactively identify early signs when families may be struggling. This way, support can reach families before problems have a chance to escalate. The programme is guided by the principle of 'progressive universalism', recognising that all families need some support, but that some may need additional targeted or specialist help.

Research and evidence-based

Evidence-based services are those that have been evaluated and found to have clear positive outcomes. *Science-based* means services designed with clear theories and mechanisms of change, rooted in the best available research, but that have yet to be rigorously evaluated. ABS partnerships are also undertaking original research and development to address gaps in evidence.

Co-production

A Better Start harnesses the expertise of outstanding researchers and practitioners and brings them together with members of the community – people who are 'experts by experience'. And it is through this exchange that they are able to gain deeper insight and understanding, and to work together to co-design solutions that are not only scientifically robust, but fit the local context and have the potential to be sustained.

Strengths-based

Services aim to reduce the stresses and barriers families face, while also seeking to build capacity and capabilities within families and communities themselves. So, for example, strong community engagement work builds trust and is increasing access to evidence-based programmes like Empowering Parents, Empowering Communities which are delivered by specially accredited local parents, to local parents. 'The process of developing local strategies in A Better Start began with building a shared understanding of the issues and challenges each local area faced.'

Seamless and integrated support

Historically, services have often operated in silos. ABS partnerships are focusing on building seamless pathways and progression between services. For example, Blackpool has embarked upon a radical redesign of its health visiting services, embedding innovative practice such as behavioural activation and promotional interviewing into the practitioners' toolkit. They are also embedding an exciting evidence-based universal programme called Baby Steps – which is co-delivered by health visitors (bringing child health expertise) and family engagement workers (connecting families to wider community resources).

Test and learn

There are no silver bullets. 'Test and learn' means using the best available evidence and trying things on a small scale in order to learn from them. It means adapting and refining services and programmes along the way, sharing what works and what doesn't, as a way of improving the system as a whole.

This unique ten-year investment provides time and space for local partnerships to carefully co-design, implement and embed effective innovations into local systems. An independent national evaluation (Barlow *et al.*, 2017), funded by the National Lottery, will capture learning and add critical new insights to the international body of evidence on what works to improve early childhood development.

Further details

More information is available at: www.biglotteryfund.org.uk/abs Contact: abetterstart@biglotteryfund.org.uk

References .

Barlow, J., Beake, S., Bick, D., Bryson, C., Day, L., Gilby, N. et al. (2017). Initial protocol for a national evaluation of an area-based intervention programme (A Better Start) on early-life outcomes: a longitudinal cohort study with comparison (control) cohort samples. BMJ Open 7(8): e015086. Commission on Social Determinants of Health. (2008). *Closing the Gap in a Generation: Health equity through action on the social determinants of health*. Geneva, World Health Organization. Hertzman, C. and Boyce, T. (2010). How experience gets under the skin to create gradients in developmental health. *Annual Review of Public Health* 31: 329–47.

Urban95: creating cities for the youngest people

Patrin Watanatada

Knowledge for Policy Director, Bernard van Leer Foundation, The Hague, Netherlands¹ Cities can be wonderful places to grow up, but they can also pose serious challenges for healthy child development. The Bernard van Leer Foundation's Urban95 initiative seeks to make lasting change in the city landscapes and in the opportunities that shape the crucial first five years of children's lives. Urban95 works with urban leaders, planners, designers and managers to ask: 'If you could experience the city from an elevation of 95 cm – the height of a 3 year old – what would you do differently?'

Key to Urban95 are:

- a focus on the youngest children (from before birth to age 5) and their caregivers, a group often under-addressed even by child-friendly city or liveable city policies
- working on a city-wide scale through municipal planning mechanisms, data-driven management and politically visible areas of investment
- attention to the built environment through a focus on public space and mobility, two areas where impacts on child development are important but less well understood than they are in other areas such as access to early childhood services, sanitation, healthcare or housing.

With Urban95, we work with cities and urban entrepreneurs to identify and scale ideas to change the way families with young children live, play, interact and move through cities. We also work with media partners and influencers to raise awareness among urban decision-makers of what urban babies, toddlers and caregivers need, and with urban design and planning firms to develop training classes and tools for practitioners.

At the heart of Urban95 are partnerships with cities committed to taking promising practices from pilot to scale. Among the first city partnerships was with Tel Aviv, Israel, as explored in more detail on pages 90–3.

Experiencing the city from an elevation of 95 cm

Urban95 seeks to improve two critical factors in early childhood development – the quality and frequency of interactions between young children and their caregivers, and the well-being of these caregivers – through the provision of early childhood services, public space, transport, planning, land use and data management in cities.

 This article is the result of conversations with colleagues across the Bernard van Leer Foundation, in particular Yigit Aksakoğlu, Daniella Ben-Attar, Esther Goh, Darell Hammond, Ardan Kockelkoren, Joan Lombardi, Rachel Machefsky, Rushda Majeed, Leontien Peeters, Cecilia Vaca Jones, Julien Vincelot, Leonardo Yánez and most of all Michael Feigelson, who came up with the name Urban95. When we talk with urban designers and planners – who think in tangible, spatial specifics – we emphasise that, for their healthy development, babies and toddlers living in cities:

- need frequent, warm, responsive interactions with loving adults and a safe, stimulating physical environment to explore
- experience the world at a much smaller scale and have a dependent and far shorter range of mobility than the typical city dweller
- are particularly vulnerable to air and noise pollution
- need to travel regularly to early childhood services such as well-baby clinics and childcare
- are always to be found with their caregivers.

This means walkable neighbourhoods that cater for the basics a young family needs, public spaces close to home that attract all generations while allowing small children to explore safely, and reliable transport that makes it easy, affordable and enjoyable for families with young children to travel where they need to go.

Through our city partnerships and the Urban95 Challenge, our small innovation grants programme, we are finding many promising ideas at both pilot and citywide scale. Some examples are described below. We expect many more as our partners progress with their work.

Parenting

- Urban parenting messages. Adapted from those developed for Boston Basics², messages to encourage parents to talk, sing and play with their young children have appeared on digital advertising hoardings across São Paulo.
- Connecting caregivers with municipal services for families. Tel Aviv has launched Digitaf or 'digital for toddlers', an online platform to connect parents with healthcare, childcare, public events for families, discounts from local shops and tips on parenting.

Public space

- A sensory park for children with special needs. In Bhubaneshwar, India, the municipality is building a sensory park that includes special spaces and facilities for children with visual difficulties and other disabilities.
- *Mobilising families to monitor and advocate for better air quality.* In Turin, Italy, 'Che Aria Respiro' is working with children and caregivers to monitor air quality, test pedestrian-only zones and engage in local advocacy.

Mobility

 Maps to improve road safety. In Mexico City, 'Liga Peatonal' mapped existing data on traffic accidents to locate dangerous crossings near schools and childcare services. The maps gained significant public attention and are being used to influence decision making on improving road safety near schools.

'With Urban95, we work with cities and urban entrepreneurs to identify and scale ideas to change the way families with young children live, play, interact and move through cities.'

2 More on The Basics, and how they have been applied in Boston and other cities, can be found at: http://boston.thebasics.org/.

Data-driven management

- Demonstrating interventions at neighbourhood level. In Bogotá, Colombia and Recife, Brazil, the Children's Priority Zone is an experimental concept to measure and demonstrate improvements in public space and mobility for young children in a defined area around an anchor point such as a childcare or community centre.
- *Mapping city-wide inequalities in public space and family services.* As part of the Istanbul95 initiative, Kadir Has University and TESEV have created a 'social atlas' using property values as a proxy indicator for poverty.
- An urban Chief Child Development Officer. In Tirana, Albania, Mayor Erion Veliaj has appointed a new officer to audit current city policies and programmes for their impact on young children and make recommendations.

Lessons learned

We are learning much so far. Most importantly, we have learned to talk about the specific needs of young children and caregivers. We initially worried that city leaders would feel as if we were adding yet another 'to do' to their task list, so we talked instead about how Urban95 initiatives benefit the whole city – for example, widening footpaths and adding dropped kerbs help both adults with pushchairs and adults in wheelchairs. But we were soon told by city leaders that early childhood initiatives get broad political support, and better understanding the needs of young children creates a sense of purpose.

We have learned that addressing young children's needs requires effective collaboration across city agencies – such as planning, health, education, social welfare, parks and recreation, and transport – and that this requires a mandate from top leadership, dedicated staff and shared data. It helps with political buy-in to position initiatives as benefiting all families, not just specific vulnerable groups. This also avoids stigma in taking up services. Engaging the community is necessary to gain public support and encourage greater use and maintenance of public space.

It helps to 'think small': inexpensive, quick and temporary projects, like painting coloured patterns and lines on roads to encourage cars to slow down, can demonstrate success and build support.

And it helps to 'think different', looking for opportunities to influence existing budgets before asking for new funds. But ultimately we need to 'think big', aiming for toddler-scale and even car-free neighbourhoods where all children have what they need both to survive and to thrive. A recent blog by Project for Public Spaces (2018) quotes Lewis Mumford: 'Let's forget the damned motor car and build cities for lovers and friends.' We'd add only: 'and babies and their parents'. 'Through our city partnerships and the Urban95 Challenge, we are finding many promising ideas at both pilot and citywide scale.'



△ Photo: Casa de la Infancia Foundation

For more information

More information on our Urban95 work and partners can be found at: www.bernardvanleer.org/urban95. For readers interested in learning more about different organisations' and researchers' approaches to these issues, here are some suggested further readings. We'd love to hear of others, particularly from other parts of the world.

- Urban95 Starter Kit (Bernard van Leer Foundation, to be published, 2018);
- *Handbook on Child-Responsive Urban Planning* (UNICEF, to be published, Spring 2018);
- Space to Grow: Ten principles that support happy, healthy families in a playful, friendly city (Gehl Institute, to be published Spring 2018);
- *Mix & Match: Tools to design urban play* (Krishnamurthy, Steenhuis and Reijnders, to be published, 2018);
- Play Everywhere Playbook (KaBOOM!, 2018);
- Cities Alive: Designing for urban childhoods (Arup, 2017);
- Hope Starts Here: Detroit's Community Framework for Brighter Futures (2017)
- How Dashboards Can Help Cities Improve Early Childhood Development (Open Data Institute, 2017);

- Building Better Cities with Young Children & Families (8 80 Cities, 2017);
- Compendium of Best Practices of Child Friendly Cities (India's National Institute of Urban Affairs, 2017);
- 'Can the neighbourhood built environment make a difference in children's development?' (Villanueva et al., 2015);
- *Global Street Design Guide* (National Association of City Transportation Officials (NACTO), 2015);
- Small Children, Big Cities (Bernard van Leer Foundation, 2014);
- *Placemaking and the Future of Cities* (Project for Public Spaces, 2012);
- *Healthy Environments, Early Childhood in Focus* 8 (Bernard van Leer Foundation, 2012);
- Child in the City (www.childinthecity.org), a website increasingly serving as a focal point for child-friendly cities news around the world;
- CityLab (www.citylab.com), one of the world's leading sources for news on urban trends, policies and innovations, running a series funded by the Bernard van Leer Foundation in 2018.

Last but not least, for a beautiful essay on urban planning from the perspective of a toddler, see Eric Feldman's 'Child-friendly cities: what my toddler taught me about city design' (2015).

References

- 8 80 Cities. (2017). Building Better Cities with Young Children & Families. Toronto/The Hague: 8 80 Cities/Bernard van Leer Foundation. Available at: https://www.880cities.org/ wp-content/uploads/2017/11/BvLF-8-80-Cities-Report-Final.pdf (accessed April 2018).
- Arup. (2017). Cities Alive: Designing for urban childhoods. London: Arup. Available at: https:// www.arup.com/publications/research/section/ cities-alive-designing-for-urban-childhoods (accessed April 2018).
- Bernard van Leer Foundation. (2012). Healthy Environments, Early Childhood in Focus 8. The Hague: Bernard van Leer Foundation. Available at: https://bernardvanleer.org/app/ uploads/2015/12/ECIF8_Catalogue-Healthy-Environments.pdf (accessed April 2018).
- Bernard van Leer Foundation. (2014). Small Children, Big Cities, Early Childhood Matters 123. The Hague: Bernard van Leer Foundation. Available at: https://bernardvanleer.org/app/ uploads/2015/12/Small-children-big-cities.pdf (accessed April 2018).

- Feldman, E. (2015). Child-friendly cities: what my toddler taught me about city design. The Plan. Place Blog. Available at: http://planplaceblog. com/2015/01/20/child-friendly-cities/ (accessed April 2018).
- Gehl Institute. (2018, in press). Space to Grow: Ten principles that support happy, healthy families in a playful, friendly city. New York: Gehl Institute.
- KaBOOM! (2018, online). *Play Everywhere Playbook*. Available at: https://kaboom.org/ playbook (accessed April 2018).
- Murdoch Children's Research Institute. (2014). The Evidence: What we know about place-based approaches to support children's wellbeing. Melbourne: Centre for Community Child Health. Available at: https://www.rch.org. au/uploadedFiles/Main/Content/ccch/ CCCH_Collaborate_for_Children_Report_The_ Evidence_Nov2014.pdf (accessed April 2018).

- National Association of City Transportation Officials. (2015). *Global Street Design Guide*. New York: NACTO.
- Project for Public Spaces. (2012). *Placemaking and the Future of Cities*. New York: PPS.
- Project for Public Spaces. (2018) What is Placemaking? – Public space is for lovers. Available at: https://www.pps.org/article/ public-space-is-for-lovers (accessed April 2018).
- UNICEF. (2018, in press). *Handbook on Child-Responsive Urban Planning*. New York: UNICEF.
- Villanueva, K., Badland, H., Kvalsvig, A., O'Connor, M., Christian, H., Woolcock, G. *et al.* (2015). Can the neighbourhood built environment make a difference in children's development? Building the research agenda to create evidence for place-based children's policy. *Academic Pediatrics* 16(1): 10–19.

It takes a city: making early childhood a strategic priority in Tel Aviv

Daniella Ben-Attar

Country Representative, Bernard van Leer Foundation, Israel When our Urban95 programme began to work with the Municipality of Tel Aviv-Yafo, we initially thought about what programmes and activities the municipality might implement. We have since come to understand that the success, scalability and sustainability of any such programmes and initiatives depend first on building the organisational capacity, mechanisms and political will – mobilising diverse actors to work together on city-wide strategies, and establishing new mechanisms for day-to-day working. To our surprise, Urban95 is turning into a strategic transformation throughout the municipality.

Urban95 encourages city leaders and planners to view urban life from a perspective of 95 cm, the average height of a 3-year-old child. Issues that affect urban young children and their families span sectors, but need to be seen as a whole. Urban governance for early childhood not only requires collaboration across a range of departments, from education to welfare and health, which are typically siloed, it also necessitates addressing issues such as transport, air quality, infrastructure and parks, which have a proportionately larger impact on young children than the general populations.

Yet children under 5 are often largely invisible in municipal policy and strategy. In the past, Tel Aviv – like other Israeli cities – recognised children as city residents only when they entered the formal preschool education system at age 3. Beyond basic national health services, the question of what cities should do for younger children simply did not come up. Urban planners in Israel have called this age group 'the black hole of urban planning', as there are almost no planning guidelines or regulations for them. New parents trying to arrange childcare, find safe and stimulating public spaces to enjoy with other families, or simply get around the city with a baby or toddler in tow, were on their own.

Locating Urban95 in the municipal governance structure

When the municipality's leaders made a strategic decision to work with the Urban95 programme, it was necessary to decide where in the municipal government structure to locate it. While some might have seen social services or education as a natural fit, municipal leaders decided on the newly established Community Administration department, which had the advantage of bringing a fresh start and the potential to integrate issues at the community level. Community Administration appointed an Urban95 Project Manager, funded by the Bernard van Leer Foundation but working as an employee of the municipal government within its organisational structure.

Raising awareness across other municipal departments

Next there was a need to raise awareness among diverse practitioners and decision makers that this had something to do with them. It was not immediately obvious to the City Engineer or Transportation Planner, for example, that they have a potential role as 'brain builders' for infants. The Urban95 programme manager's job description explicitly included working with diverse departments to forge an integrated, cross-sector response to early childhood. With the support of management, and together with the Manager of Community Development, she initiated a 'municipal road show' to present Urban95 to key stakeholders within the municipality, from public health to data collection to engineering to parks and recreation.

Consolidating a multidisciplinary team

A key turning point came when an interdisciplinary team of municipal managers participated in the week-long Foundation-funded Harvard executive course on leading and scaling early childhood initiatives, including two influential highlevel managers – the City Engineer and the Head of Community Administration. The experience was transformative, in part because it was unusual for such a senior cross-departmental group to spend intensive time together, and in part because of the new knowledge the participants gained on brain development and how public space and city management can influence the long-term human development of children.

Making babies and toddlers visible

Initial activities were developed and implemented, notably including Digitaf (the name is a play on words in Hebrew meaning 'digital platform for toddlers'), an extension of the city's award-winning online platform, Digitel. Digitaf connects parents to services in a streamlined way, from childcare to playgrounds to 'well baby' clinics. It also offers parenting tips, in partnership with the Vroom app, including in translations that reach the city's asylum-seeker community. With banners across the city and over 5000 parents and young children taking over City Hall for the launch event led by the Mayor, Digitaf created awareness not only in the city but also in the city government. Over 18,000 cards to enable access to the digital platform have been issued to children in the first few weeks.

However, even with interest and goodwill from other departments, explaining Urban95 concepts was challenging. After the Harvard course, where the team focused on public space, the city announced an extra EUR 3.5 million for playgrounds dedicated for children under 6. The Urban95 team knew that effectively using these funds for early childhood development would require a more comprehensive approach than ordering new playground equipment for this age group, involving landscaping, nature and civic engagement. But there was a limit to how persuasive theories could be: it became clear that departmental managers needed to see and experience such places for themselves. 'When the municipality's leaders made a strategic decision to work with the Urban95 programme, it was necessary to decide where in the municipal government structure to locate it.'



△ Photo: Oded Antman/Bernard van Leer Foundation

Mobilising new champions through city-to-city learning

At the request of the Tel Aviv Urban95 Team, the Bernard van Leer Foundation funded a study visit for senior Tel Aviv management, from different sectors, to Copenhagen, Denmark – a city known for being walkable, bikable, peoplefriendly and among the best in the world for child development. In partnership with Gehl architects and our partners in Tel Aviv, we carefully designed an itinerary and sold the idea to municipal leaders, who had to be persuaded to let several of their top managers go away together for nearly a week. After intensive follow-up work, some results from the study tour can be seen. The parks and recreation manager ordered Tel Aviv's first nature-inspired public park to be put up, developing a system of seating areas with sand pits to encourage parent interaction with their young children's developmental play. The manager of the social services department decided to implement home visits for first-time mothers through the municipal health system, and work with the community administration to link well baby clinics with community centres. City leaders agreed to commit additional funds to this new, integrated network of neighbourhood-level spaces for play and parenting support activities, allowing for more paedogogical instructors to be employed and activities to be offered at an affordable cost.

Towards a shared strategy for scale

By bringing to life how early childhood development connects to broader agendas, the Urban95 strategy and capacity-building activities widened the tent and created new champions for early childhood in Tel Aviv. The Copenhagen team evolved into a formal steering committee for Urban95, which will take the lead on wider processes now being developed to create a city vision and strategy among a broader set of stakeholders.

Engaging middle management and those who will be involved in implementation –to create bottom-up as well as top-down support – is creating joint ownership and cross-sector collaboration, making young children a strategic priority for the city, and developing sustainable underpinnings for scale.

'By bringing to life how early childhood development connects to broader agendas, the Urban95 strategy widened the tent and created new champions for early childhood in Tel Aviv.'

Lifelong impact of nutrition in the first thousand days after conception

Jaap Seidell

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Department of Health Sciences, Youth and Lifestyle Section, Vrije Universiteit, Amsterdam, the Netherlands Chronic non-communicable diseases such as Type 2 diabetes, cardiovascular disease and obesity are reaching epidemic proportions worldwide, accompanied by severe impairment of quality of life and huge cost of medical care. Take the Netherlands, for example: in a population of about 17 million, about a million adults have Type 2 diabetes. Close to 4 million are on lifelong medication for hypertension. Over a million take statins every day to reduce their cholesterol levels. Almost half of the population is overweight or obese (statistics Netherlands, 2012). Those with a relatively low socioeconomic position are at increased risk. Prevention, targeting high-risk groups and individuals, is a necessity.

Prevention deals with behavioural and environmental determinants of these diseases: in particular, smoking, excessive use of alcohol, lack of physical activity and unhealthy diets. These, in turn, are heavily influenced by physical, economic and socio-cultural environments related to increased urbanisation and globalisation of markets. The World Health Organization (WHO) has estimated that about 80% of chronic non-communicable diseases can be prevented by healthier lifestyles.

The WHO also stresses the importance of a 'life course' approach to prevention, starting at conception. Especially the first 1000 days, from conception until the second birthday, are considered to have a crucial and potentially lifelong effect on the growth and development of children (Woo Baidal *et al.*, 2016). Here at the Vrije Universiteit Amsterdam we are currently involved with ongoing monitoring of the effectiveness of the Amsterdam Healthy Weight Programme, which is showing early signs of promise in reducing the incidence of childhood overweight and obesity. Its approach has potential to be replicated elsewhere, as outlined in a recent report by the Centre for Social Justice (2017) in the UK (see page 97).

Threats and opportunities before birth

It is increasingly recognised that nutrition affects the health of the child even before conception, by influencing intra-uterine growth and development. For instance, the degree to which a mother and father are overweight at conception predicts, to some extent, the likelihood of their future offspring being overweight. This partly reflects genetic susceptibility that is transferred from the parents. But studies have shown that when mothers with obesity lose weight before pregnancy, this also lowers the risk of their children being overweight. The intra-uterine environment may affect the metabolic programming in the foetus: in an obese mother, for example, this could lead to insulin resistance, low muscle mass and reduced metabolic rate, all of which can predispose the child to future risk of obesity and Type 2 diabetes.

Some effects of intra-uterine nutrition are mediated by epigenetic effects of nutrients. Epigenetics describes the cellular processes that determine whether a certain gene will be transcribed and translated into its corresponding protein. It is a specific kind of metabolic programming, which occurs through DNA methylation. Food containing nutrients that can act as methyl donors, such as folic acid and choline, may be of particular interest in this regard. These epigenetic changes may have lifelong effects and even may have transgenerational consequences. This means that, for instance, effects of malnutrition during pregnancy not only affects the health of the offspring but also of the grandchildren. An example was recently demonstrated by the Dutch Hungerwinter project (Tobi *et al.*, 2018): more than 70 years after the Second World War, children of mothers who during their pregnancy were exposed to famine during the final stages of the German occupation still showed epigenetic changes in a number of genes relating to energy metabolism and glucose regulation. Further research is needed in this fascinating area.

In addition to the mother being overweight at conception, excessive weight gain by the mother *during* pregnancy also has adverse effects. It increases her risk of gestational diabetes and hypertension, which may lead to obstetric complications and further exacerbate the child's future risk of chronic diseases. On the other hand, lack of nutrients during pregnancy, due to the mother's malnutrition, may lead to intra-uterine growth retardation that may impair organ development with a lasting effect on the child's metabolism. The changed metabolism, in turn, may predispose toward future increased risk for Type 2 diabetes and cardiovascular diseases.

The first two years after birth are crucial too

After birth, nutrition continues to be important for the child's mental, physical and social growth and development (van Eijsden *et al.*, 2015; Pietrobelli *et al.*, 2017). Exclusive breastfeeding for at least four to six months is considered to provide optimal nutrition, and partial breastfeeding is to be encouraged up to one or two years of life. The quality of weaning foods after six months should secure optimal nutrition: not only optimal supply of nutrients, such as essential fatty acids, and adequate intakes of proteins, vitamins and minerals, but also the avoidance of foods rich in free sugars. In particular, sugary drinks seem to contribute to excessive consumption of calories, mainly because they do not affect appetite regulation effectively. This is a crucial stage for development of taste preferences and lasting attitudes towards certain foods. The texture of foods is also important in this phase, when the child is learning to chew and swallow fibre-rich and hard foods. 'It is already clear that nutrition in the first 1000 days is of prime importance for children's future health and well-being.'



△ Photo: AAGG

Excessive weight gain of the child in the first year of life may indicate an increased risk of later being overweight or obese. Routine monitoring of linear growth and weight is important to identify high-risk patterns of growth, and may prompt early interventions to prevent weight problems later. It is not only dietary habits that are important. Lack of physical activity, chronic sleep deprivation and frequent use of antibiotics may contribute to the risk of obesity.

The effect of antibiotics points towards a potentially important role of the gut microbiome, the composition of which is largely determined by nutrition. Fibrerich products are considered to have beneficial effects on the diversity of bacteria in the intestine. Pre- and probiotics may have a positive effect on children's growth and development. This area of research is quickly developing and may lead to effective preventive interventions against chronic diseases in the future.

Joint efforts for a healthy start

Although many details of the underlying mechanisms have still to be unravelled, it is already clear that nutrition in the first 1000 days is of prime importance for children's future health and well-being. Assuring optimal nutrition during this critical phase of life should be a priority in public health policy and in the practices of midwifery and youth healthcare.

Learning from the Amsterdam Healthy Weight Programme

Extracts edited and abridged by *Early Childhood Matters* from *Off the Scales: Tackling England's childhood obesity crisis*, report published by the Centre for Social Justice, December 2017

Between 2013 and 2017, childhood obesity and overweight rates in Amsterdam went down by 12% for all children and by 18% among the most deprived children. The *Amsterdamse Aanpak Gezond Gewicht* (AAGG), ('Amsterdam Healthy Weight Programme'), demands attention because two of the main factors that have made it successful so far are transferable and replicable to other countries. These two factors are political leadership, and the adoption of a whole-systems, collective approach.

The lessons to be learned are not in what specific interventions were introduced, since they were based on what was appropriate and feasible in Amsterdam and its target neighbourhoods. Rather, the key lessons are in how the programme was introduced, how it was politically led and how a whole-systems approach was successfully implemented.

In 2012, Amsterdam City Council's Alderman and Deputy Mayor, Eric van der Burg, brought the municipality's political leaders together to commit to doing something bold and mission-led. In 2013, the AAGG was launched with the aim of supporting children and parents to be healthier by engaging with them alongside professionals and organisations that work with children or significantly influence their lifestyles. In contrast to a treatment-based approach, AAGG focuses on integrated, cross-sector and cross-departmental actions involving politicians, local authorities, schools, medical professionals, planning bodies, sports organisations, communities and neighbourhoods, charities, and the business sector.

The key principles of the programme are political leadership, focus on social impact, whole-systems, targeted learning development based on consistent monitoring, and value in professionals and professional training. Interventions take place during the first 1000 days (from conception to 2 years old), in schools (from preschool to secondary), in neighbourhoods (including targeting efforts and monitoring success), and in the creation of a healthy environment (including urban design and regulation of the food and drinks industry, such as restricting unhealthy marketing to children).

There was an understanding that the majority of families with obese or overweight children were often multi-problem families with multi-complex

needs, and so addressing the issue of childhood obesity was about more than just getting children to eat better and exercise more. It was about tackling the complex social issues behind unhealthy behaviours, such as mental health issues, poverty and lack of education.

The initial commitment to reduce childhood obesity did not include any funding commitments. This was a deliberate move by Alderman van der Burg, who believed the key to success was first to identify, draw upon and pool existing resources from across the various departments and sectors. Focus began on joining up existing services by identifying community-, school-, local government- and neighbourhood-led projects that already existed. The one initial cost was for the departments to each employ a programme or project manager who was paid for by the participating departments. By not putting a price on the project at the beginning, time for the joining up and mapping of existing services and opportunities was allowed. Funding down the line was then provided based on evidence, including identifiable gaps in support. A key feature of the AAGG is the joining-up of existing programmes and interventions, and the introduction of interventions to fill the gaps.

To build an effective long-term plan independent of political cycles, a crossdepartmental team, put together by the programme manager, developed a 20-year plan and model. Science and learning institutes play a key role. The programme's guiding principle is 'learning by doing, doing by learning'. The Vrije Universiteit Amsterdam is developing external monitoring tools to ensure independent monitoring of results. The programme and approach has constantly changed since it was introduced, which is considered to be a good thing, because it is an iterative process where interventions are constantly improved or changed for the better, and new interventions are introduced along the way where necessary.

AAGG intervention examples: the first 1000 days

The programme recognises the importance of the first 1000 days (from conception to 2 years old), including maternal health during pregnancy for the health of a child. Support is provided in three main ways:

- 1 **Information** All parents of unborn children and children from birth to 4 years in Amsterdam receive information about healthy nutrition at all ages of their child's life.
- 2 **Connected care** All pregnant women and young parents have regular appointments with medical professionals (midwives, youth health care nurses, etc.). These professionals agree on the way to work together, share necessary information and use the same information for parents. Special focus lies in the detection of (a higher risk of) overweight and obesity before the age of 2 years.

3 **Healthy communities** During pregnancy and early childhood, the informal network and community surrounding parents is incredibly important and powerful. Key persons within these networks are trained about healthy lifestyle and invited to organise activities.

Specific examples of interventions in the first 1000 days include:

- growth app in this popular information app, information about healthy lifestyles for pregnant women is included
- referral by medical professionals to customise coaching programmes for future parents
- screening infants for risk of obesity, with extra support provided to at-risk families
- nurses provide two years of support to teenagers and more deprived mothers
- development of a new pregnancy course for more deprived women
- greater access to fitness programmes and information for young children
- prenatal home visits
- 'Healthy Weight Pact' strategy, which involves midwives
- research involving teenagers, which examines how expectant mothers can be best supported inside and outside of the doctor's office.

References

- Centre for Social Justice. (2017). Off the Scales: Tackling England's childhood obesity crisis. London: Centre for Social Justice. Available at: https://www.centreforsocialjustice.org.uk/core/ wp-content/uploads/2017/12/CSJ-Off-The-Scales-Obesity-Report.pdf (accessed March 2018).
- Pietrobelli, A., Agosti, M. and the MeNu Group. (2017). Nutrition in the first 1000 days: ten practices to minimize obesity emerging from published science. *International Journal of Environmental Research and Public Health* 14(12): 1491.

Statistics Netherlands (CBS). (2012, online). More people overweight. Available at: https://www. cbs.nl/en-gb/news/2012/27/more-peopleoverweight (accessed February 2018).

- Tobi, E.W., Slieker, R.C., Luijk, R., Dekkers, K.F., Stein, A.D., Xu, K.M. *et al.* (2018). DNA methylation as a mediator of the association between prenatal adversity and risk factors for metabolic disease in adulthood. *Science Advances* 4(1): eaao4364.
- Van Eijsden, M., Meijers, C.M., Jansen, J.E., de Kroon, M.L. and Vrijkotte, T.G. (2015). Cultural variation in early feeding pattern and maternal perceptions of infant growth. *British Journal* of Nutrition 114(3): 481–8, doi: 10.1017/ S0007114515000951.
- Woo Baidal, J.A., Locks, L.M., Cheng, E.R., Blake-Lamb, T.L., Perkins, M.E. and Taveras, E.M. (2016). Risk factors for childhood obesity in the first 1,000 days: a systematic review. *American Journal of Preventive Medicine* 50(6), 761–79.

SHORT TAKES ON CURRENT ISSUES

Pollution and child development

Philip J. Landrigan

Professor of Pediatrics and Environmental Medicine, Icahn School of Medicine at Mount Sinai, New York, USA¹ Pollution is the largest environmental cause of disease and death in the world today. Pollution is responsible for 9 million deaths per year – 16% of all deaths worldwide – three times more deaths than from AIDS, tuberculosis and malaria combined (Landrigan *et al.*, 2018). In many parts of the world, pollution is getting worse.

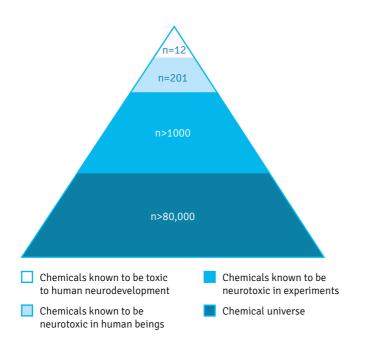
Pollution is also a major cause of developmental disabilities: injuries that impair children's health, diminish their capacity to learn, and reduce their lifetime earnings. Pollution exposures in the first 1000 days of life – from conception to age 2 years – are especially dangerous, because during this time children's bodies are growing and their organ systems are moving through complex developmental processes that can easily be disrupted. Exposures to even low levels of pollution during the first 1000 days can stunt children's growth, increase their risk of disease, and cause lasting damage to their brains, lungs, reproductive organs and immune systems (Landrigan and Etzel, 2013).

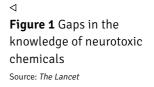
Air pollution, especially fine particulate air pollution, is a hazard worldwide. A mother's exposure to particulate air pollution during pregnancy can injure her child's brain and thus diminish the child's intelligence, shorten attention span and increase risk of attention deficit hyperactivity disorder (ADHD) (Perera *et al.*, 2014). Air pollution exposure in pregnancy increases risk for prematurity and low birthweight, two further risk factors for developmental disabilities. (Woodruff *et al.*, 2007). And air pollution exposure during infancy and early childhood causes lung damage and leads to asthma, pneumonia and chronic pulmonary disease (Gauderman *et al.*, 2015).

Chemical pollution is another hazard. More than 140,000 new chemicals and pesticides have been invented in the past 50 years. Young children and pregnant women are exposed daily to manufactured chemicals in air, water, consumer products and food (Landrigan and Goldman, 2011). Routine monitoring surveys detect several hundred chemical pollutants in the bodies of all persons (Centers for Disease Control and Prevention, 2017). Some widely used chemicals are known to be toxic to children's development. But because of weak governmental regulations, hundreds more have never been tested for safety or toxicity and their possible dangers to children's health are not known (Landrigan and Goldman, 2011).

1 Professor Landrigan served from
2015 to 2017 as co-Chair of the
Lancet Commission on Pollution
and Health.Neurotoxic pollutants – chemicals that cause silent damage to children's
brains – are an especially grave threat (Grandjean and Landrigan, 2014). An
example is lead. Exposure to even very low levels of lead during pregnancy and

in early childhood can cause reduced IQ and impaired learning in childhood, juvenile delinquency in adolescence, and increased risk of violent crime in adult life (Needleman *et al.*, 1979). Early life exposures to other neurotoxic pollutants such as organophosphate pesticides, mercury, brominated flame retardants, and the plastics chemicals – phthalates and bisphenol A – are linked to learning disabilities, ADHD, conduct disorders and autism. A major unanswered question is whether there are additional chemicals in use today whose dangers to children's health have not yet been recognised because these chemicals have never been tested (Grandjean and Landrigan, 2014).





Of the thousands of chemicals in commerce, only about 12 have been proven to cause developmental neurotoxicity in children, but another 200 can cause neurotoxicity in adult workers, and another 1000 are neurotoxic in experimental animals. It is not known how many of the untested chemicals in wide use today may be able to cause injury to children's developing brains.

The great danger of pollution exposure in early life is that it can undermine efforts to enhance children's development through improved nutrition, early learning and better healthcare. Because it erodes children's potential to learn and diminishes their capacity to develop and grow, pollution condemns generations of children to a lifetime of disease and poverty.

The *Lancet* Commission on Pollution and Health has called upon mayors, heads of state, international organisations, global philanthropies and civil



△ Photo: The Lancet

society organisations to address the neglected global problem of pollution and to make prevention of pollution-related disability a priority (Landrigan *et al.*, 2018). The tools needed to control pollution have been developed; they have been successfully taken to scale and proven cost-effective; they are ready to be deployed worldwide. Pollution control is a winnable battle. It is critical to protecting the health of today's children and the well-being of future generations.

References

- Centers for Disease Control and Prevention. (online). National Biomonitoring Program. Available at: https://www.cdc.gov/ biomonitoring/ (accessed December 2017).
- Gauderman, W.J., Urman, R., Avol, E., Berhane, K., McConnell, R., Rappaport, E. *et al.* (2015). Association of improved air quality with lung development in children. *New England Journal of Medicine* 372(10): 905–13.
- Grandjean, P. and Landrigan, P.J. (2014). Neurobehavioural effects of developmental toxicity. *The Lancet Neurology* 13(3): 330–38.
- Landrigan, P.J. and Etzel, R.A. (eds). (2013). *Textbook of Children's Environmental Health.* New York: Oxford University Press.
- Landrigan, P.J., Fuller, R., Acosta, N.J.R., Adeyi, O., Arnold, R., Basu, N. *et al.* (2018). The *Lancet* Commission on pollution and health. *The Lancet* 391(10119): 462–512, doi:10.1016/ S0140-6736(17)32345-0.
- Landrigan, P.J. and Goldman, L.R. (2011). Children's vulnerability to toxic chemicals: a challenge and opportunity to strengthen health and environmental policy. *Health Affairs* 30: 842–50.
- Needleman, H.L., Gunnoe, C., Leviton, A., Reed, R., Peresie, H., Maher, C. and Barrett, P. (1979). Deficits in psychologic and classroom performance of children with elevated dentine lead levels. *New England Journal of Medicine* 300(13): 689–95.
- Perera, F.P., Chang, H., Tang, D., Roen, E.L., Herbstman, J., Margolis, A. *et al.* (2014). Early-life exposure to polycyclic aromatic hydrocarbons and ADHD behavior problems. *PLoS One* 9: e111670.
- Woodruff, T.J., Darrow, L.A. and Parker, J.D. (2007). Air pollution and postneonatal infant mortality in the United States, 1999–2002. *Environmental Health Perspectives* 116: 110–15.

Why water, sanitation and hygiene (WASH) are fundamental to early childhood development

Amy Keegan

Policy Officer, WaterAid, London, UK WaterAid is an international not-for-profit organisation fighting to make clean water, decent toilets and good hygiene normal for everyone, everywhere. We transform millions of lives every year. But why is this especially relevant to early childhood development? Access to water, sanitation and hygiene (WASH) is a prerequisite for a healthy child. Not only do WASH services benefit the immediate dignity and safety of the child and mother, they also provide long-term health, social and economic benefits.

Often the positive impacts of health interventions for children in one area are undermined by lack of WASH in another, for example:

- Nutrition programmes often focus on food and nutrient intake and neglect factors that hinder nutrient absorption such as recurrent diarrhoea, intestinal worms and other enteric infections associated with dirty water and unsanitary conditions (Cumming and Cairncross, 2016).
- While efforts to reduce maternal and newborn mortality often focus on increasing facility-based births and emergency obstetric care, newborns and mothers are frequently exposed to life-threatening infections via unhygienic birth conditions in facilities that lack basic requirements such as clean running water. In low- and middle-income countries, 38% of health facilities lack access to a basic water source (World Health Organization (WHO) and UNICEF, 2015).
- Children may be de-wormed, but then quickly and continuously be reinfected through poor WASH in schools and at home (Danaei *et al.*, 2016).

Sustainable WASH services within households and communities, healthcare facilities and schools are fundamental basics underpinning almost every aspect of early childhood development. It is therefore essential that WASH services are considered a key component of early childhood programmes in order to support the development of a happy, healthy child and mother.

Improving cross-sectoral approaches to early childhood requires better sharing of experiences of integration. The case studies described below highlight where WaterAid is contributing to better integration of WASH into health and nutrition policies and programmes. We are using our experience to advocate for governments and donors to invest in integrated approaches which deliver improved and sustainable health outcomes for children.

Nepal: integrating hygiene into immunisation programmes

In 2014, WaterAid supported Nepal's Ministry of Health to launch a pilot project in four districts to incorporate hygiene promotion into immunisation programming. The sessions used games that build on emotional drivers of behaviour – such as nurture, affiliation, disgust and social status – in an aim to change norms in areas such as exclusive breastfeeding, handwashing with soap, food hygiene, faeces management, and treatment of water for milk. The sessions reached 38,000 caregivers through 2200 trained female community health volunteers.

An independent evaluation showed the intervention was effective in improving all key hygiene behaviours, from 2% during baseline to 54% after implementation. Prevalence of diarrhoea fell from 20% during baseline to 5% during the follow-up survey. The government is now aiming to scale-up this approach nationwide.



△ Photo: Ernest Randriarimalala/WaterAid

Madagascar: integrating WASH and nutrition policy

In Madagascar, nearly half of all children under 5 are stunted; almost half the population lack access to drinking water, and 90% to sanitation (WHO and UNICEF, 2017). An estimated 50% of undernutrition is associated with repeated diarrhoea, intestinal worms and other infections directly resulting from inadequate WASH (Prüss-Üstün *et al.*, 2008). In response, the Government of Madagascar's National Action Plan for Nutrition Phase III (2017–2021) sets out a multi-stakeholder, multi-sector approach to improve coordination mechanisms on WASH and nutrition, and align actions around a common results framework.

To reinforce and accelerate these national efforts, the Scaling Up Nutrition (SUN) Movement and the Sanitation and Water for All (SWA) Partnership have established a global partnership on Nutrition and WASH focused on advocacy, and identifying and sharing good practices. Partners, including WaterAid, have supported this effort by launching new advocacy reports, such as *The Recipe for Success* (WaterAid *et al.*, 2017) and *The Missing Ingredients* (WaterAid and SHARE, 2016), which outline a toolkit for integration of WASH nutrition.

WaterAid is also one of the member organisations in the BabyWASH Coalition (babywashcoalition.org), which advocates for more integrated programming, policymaking and funding in the areas of WASH, early childhood development, nutrition, and maternal, newborn and child health.

References

- Cumming, O. and Cairncross, S. (2016). Can water, sanitation and hygiene help eliminate stunting? Current evidence and policy implications. *Maternal and Child Nutrition* 12 (Suppl. 1): 91–105. doi: 10.1111/mcn.12258.
- Danaei, G., Andrews, K.G., Sudfield, C.R., Fink, G. Charles McCoy, D., Peet, E. *et al.* (2016). Risk factors for childhood stunting in 137 developing countries: a comparative risk assessment analysis at global, regional, and country levels. *PLoS Medicine* 13(11): e1002164,doi:10.1371/ journal.pmed.1002164.
- Prüss-Üstün, A., Bos, R., Gore, F. and Bartram, J. (2008). Safer Water, Better Health: Costs, benefits and sustainability of interventions to protect and promote health. Geneva: World Health Organization. Available at: http://apps.who.int/iris/ bitstream/10665/43840/1/9789241596435_ eng.pdf (accessed February 2018).
- WaterAid, Action Against Hunger and SHARE (2017). The Recipe for Success: How policymakers can integrate water, sanitation and hygiene into actions to end malnutrition. Available at: https://washmatters. wateraid.org/sites/g/files/jkxoof256/files/ The_recipe_for_success_English.pdf (accessed February 2018).
- WaterAid and SHARE. (2016). The Missing Ingredients: Are policy-makers doing enough on water, sanitation and hygiene to end malnutrition? Available at: https://washmatters. wateraid.org/sites/g/files/jkxoof256/files/ missing_ingredients_report_wateraid.pdf (accessed February 2018).
- World Health Organization and UNICEF. (2015). Water, sanitation and hygiene in health care facilities: Status in low- and middle-income countries and way forward. Geneva: World Health Organization. Available at http://www. who.int/water_sanitation_health/publications/ wash-health-care-facilities/en/ (accessed February 2018).
- World Health Organization and UNICEF. (2017). Progress on Drinking Water, Sanitation, and Hygiene: 2017 update and SDG Baselines. Geneva: World Health Organization and UNICEF. Available at: www.UNICEF.org/publications/ index_96611.html (accessed February 2018).

Moving the needle on employersupported childcare: from business case research to action

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 For further information visit IFC's 2017 Creating Markets video 'How Mindtree retains its workers who go on maternity leave' at: https://www.youtube. com/watch?v=ZonpyxaZUWE (accessed March 2018). In both developed and developing countries, new parents facing the challenge of accessing reliable and quality childcare often have to make a difficult decision – whether to stay in the workforce or prioritise looking after their children themselves. The International Finance Corporation's Tackling Childcare business case research (IFC, 2017) shows that companies can be an essential partner in addressing this challenge, as part of a potential quadruple win-win value proposition: 'good for children', 'good for parents', 'good for employers' and 'good for economies'. But how do we move the needle on employer-supported childcare in a meaningful way?

Business drivers vary. Examples include the following:

- Banks want to retain highly skilled employees who often have built up excellent customer relationships over many years. Childcare policies contributed to more than halving the turnover rate for women at the Bank of Tokyo–Mitsubishi UFJ in Japan, from 6% in 2007 to 2.4% in 2016, saving an estimated USD 45 million in recruitment and replacement costs.
- Manufacturers want their employees to show up on time and not make production errors because they are worried about their children. On-site childcare at apparel producer MAS KREEDA in Jordan helped stabilise production lines, reduced absences due to sick leave by 9% in a few months, and boosted the company's relationships with international buyers and its reputation as an 'employer of choice' for local women. The factory's CEO said the crèche, initially perceived as a 'cost centre', turned out to be a profit centre.
- Technology firms want to avoid employees falling behind with fast-changing know-how by dropping out of the workforce for extended periods. Mindtree¹, an information technology company in India, offered an on-site childcare centre, back-up childcare and financial support to parents working night shifts and steadily increased the proportion of women among new recruits from 26% to 31% in two years. One father said: 'I was offered a salary from another company that was 30% higher, but declined the offer, as I wanted to stay at Mindtree, where I could visit my young son two or three times a day in the on-site crèche.'

Employers are legally required to support early childcare in 11 out of 50 economies examined by the World Bank Group's Women, Business and the Law programme: Brazil, Chile, Ecuador, India, Iraq, Japan, Jordan, the Netherlands, Turkey, Ukraine, and Vietnam (World Bank, 2017). In India, the Maternity Benefit Amendment Act (2017) recently required companies with over 50 employees to



△ Photo: IFC India

provide workplace access to a crèche facility. Companies are now looking for advice on how to choose the best childcare strategy for their business needs, and IFC has partnered with a childcare provider and others to conduct a survey to better understand the challenges and opportunities employers face and inform strategies for financing and implementing quality childcare provision.

We know that leading companies offer childcare solutions for their employees when they understand the benefits, including the business case for being in compliance. The critical measure of success will be whether the private sector – in partnership with government – can deliver childcare solutions that are affordable, safe, reliable and accessible to all parents, including those in the informal economy.

Reference

International Finance Corporation (IFC). (2017). *Tackling Childcare: The business case for employer-supported childcare*. Washington DC: IFC. Available at: www.ifc.org/tacklingchildcare (accessed March 2018). World Bank Group. (2017). Enabling Childcare Services in the Private Sector. Women, Business and the Law 2017. Washington DC: World Bank. Available at: http://pubdocs.worldbank.org/ en/458191519943376087/4pager-WBL2017-ChildCare.pdf (accessed March 2018)

Childcare from the perspective of women informal workers

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Deputy Director, Social Protection Programme, Women in Informal Employment: Globalizing and Organizing (WIEGO), Paris, France Women informal workers across the world have set out their demands for quality public childcare services through a campaign organised by the research-action-policy network WIEGO (Women in Informal Employment: Globalizing and Organizing).¹ The campaign grew out of research in five cities – Belo Horizonte, Brazil; Accra, Ghana; Ahmedabad, India; Durban, South Africa; and Bangkok, Thailand – in which interviews with women in informal worker organisations revealed the extent of the need for quality public childcare services (Alfers, 2016).

Informal employment accounts for more than half of non-agricultural employment in the global South, and more women than men work informally in South Asia (83%), sub-Saharan Africa (74%) and Latin America (54%) (Vanek *et al.*, 2014). Given the size of the informal economy, our approach at WIEGO is to start from the perspective of informal workers and the daily struggles they face to earn a livelihood. Workers want to secure a better future for their children but their long working hours, low earnings and poor working conditions make it difficult to find the time and resources to care for them. As informal workers, most do not receive any maternity protections and are obliged to earn an income even though their infants may be only a few weeks old. In focusing on women informal workers, we are also reaching some of the most marginalised children in urban areas.

Our research explored the childcare arrangements of 159 women informal workers including home-based workers, domestic workers, street vendors and market traders, and waste pickers in the five cities. They all had children under the age of 7 in their care; 82.5% were mothers, 15% were grandmothers and 2.5% were aunts. The type of childcare arrangement chosen depended on the institutional framework governing childcare in each country; social and cultural norms; and differences between individual workers – for example, income levels – and between groups of workers.

In Belo Horizonte, for example, the waste pickers interviewed rely on the public childcare service; however, in Durban and Accra, traders use informal and unregulated childcare services or bring their children with them to the markets if childcare centres are too expensive or of poor quality. Bringing children to work in crowded urban spaces can be dangerous for children's health and development and is distracting for workers, who see their earnings

 For information about WIEGO's childcare campaign please visit: http://www.wiego.org/wiego/ wiego-child-care-campaign



△ Photo: Paula Bronstein/Getty Images Reportage

drop. In Ahmedabad, workers who are members of the Self Employed Women's Association (SEWA) benefit from the childcare cooperative that is adapted to their working hours, providing nutritious food, education and healthcare (Moussié, 2017).

The research dispelled the myth that women informal workers can always depend on relatives to care for their young children while they work. Women informal workers are reluctant to leave their children in the care of relatives or neighbours because they worry about their children's safety in overcrowded cities and the lack of stimulation and care they receive. They are also expected to make cash or in-kind payments to those who look after their children. WIEGO research shows that to achieve positive early childhood development outcomes, the needs of the children and the women informal workers caring for them must be considered.

Reference

Alfers, L. (2016). 'Our Children do not get the Attention they Deserve': A synthesis of research findings on women informal workers and child care from six membership-based organizations. Durban: WIEGO. Available at: http://www.wiego. org/sites/wiego.org/files/publications/files/ Alfers-Child-Care-Initiative-Full-Report.pdf (accessed February 2018). Moussié, R. (2017). Women Informal Workers Mobilizing for Child Care. Cambridge, MA: WIEGO. Available at: http://www.wiego. org/publications/women-informal-workersmobilizing-child-care (accessed 28 February 2018). Vanek, J., Chen, M., Carré, F., Heintz, J. and Hussmanns, R. (2014). Statistics on the Informal Economy: Definitions, regional estimates and challenges. WIEGO Working Paper (Statistics) No. 2. Cambridge, MA: WIEGO. Available at: http://www.wiego.org/sites/default/files/ publications/files/Vanek-Statistics-WIEGO-WP2.pdf (accessed 28 February 2018).

IDELA: leveraging child-centred evidence to change policy, practice and investment

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Save the Children, Washington DC, USA As investments in young children increase, fundamental questions remain about which approaches will produce the best outcomes for the most children. Holistic and common metrics are needed to meaningfully compare results across diverse national and cultural contexts. The International Development and Early Learning Assessment (IDELA), with its caregiver questionnaire, is a direct child assessment tool that captures early learning and development status and factors that influence it.

IDELA data come directly from children themselves, not from the perceptions of parents or teachers. IDELA has been used by research institutions, international aid organisations, civil society organisations and government bodies across 54 countries, and is cited in *The Lancet* as a milestone that has influenced practice and policy in early childhood development (Black *et al.*, 2016). Countries from Colombia to Bhutan have already taken IDELA to national level to improve equity for young children.

With strong psychometric rigour and high intervention sensitivity (Wolf, 2017), IDELA informs continuous programme improvement, increases accountability among early childhood education initiatives, and offers holistic evidence about children's learning and development across countries. This evidence can help governments and global actors to scale early childhood programmes that prioritise quality and equity – programmes that take different forms but hold children as their central focus.

Seven years of IDELA have given rise to two big lessons. First, there is no onesize-fits-all programming to get children on track for their development and close equity gaps. Ultimately, all children require adequate health, care, and education to thrive, but differential inputs and different delivery mechanisms will be needed to fill the gaps that are most pressing in varied contexts.

For example, even in OECD countries where 83.8%¹ of children have access to formal early childhood education services, marginalised children, like those living in Roma communities, need additional support in order to thrive in the early years. Organisations supporting Roma children are using IDELA to test solutions like conditional cash transfers in Bulgaria and additional cultural sensitisation and second-language support in the Ukraine. Similarly, in the

1 Data from http://www.oecd.org/ els/family/database.htm.



 Δ Photo: Save the Children

USA, IDELA is being used to investigate the effectiveness of home outreach programmes for disadvantaged children.

Early childhood programmes must also meet the needs of children who have been completely displaced from their homes by war or natural disasters, or who have been exposed to serious community violence. IDELA is being used to test programmes that include additional social-emotional supports for children growing up in refugee camps in Lebanon and those living in Colombian communities that have experienced generations of war and violence (Save the Children, 2017).

Second, for the millions of children in low- and middle-income countries who will still not have access to school-based early childhood education provision by 2030, programmes that offer alternatives to formal pre-primary classes provide opportunities to achieve optimal development. For example, IDELA studies of accelerated early childhood education camps in Tanzania and parent-delivered groups in rural Ethiopia have shown that these alternative approaches can significantly improve children's early learning and development skills (Borisova, 2017). Others are using IDELA to test technology-based solutions that could both reach out-of-school children and supplement school-based programmes (Borzekowski, 2018).

As IDELA scales up globally, we learn more about the feasibility and costeffectiveness of programmes in different contexts, stimulating stakeholder buy-in and change both at a programmatic and systemic level. Its multidimensional data are identifying solutions worthy of national, regional and global investment.

Reference

Black, M.M., Walker, S.P., Fernald, L.C.H., Andersen, C., DiGirolamo, A., Lu, C., ... Grantham-McGregor, S.M. (2016). Early childhood development coming of age: Science through the life course. *The Lancet* 389(10064): 77–90. Available at: https://doi.org/10.1016/S0140-6736(16)31389-7 (accessed March 2018).

Borisova, I., Pisani, L., Dowd, A.J. and Lin, H.-C. (2017). Effective interventions to strengthen early language and literacy skills in low-income countries: comparison of a family-focused approach and a pre-primary programme in Ethiopia. *Early Child Development and Care* 187(3-4): 655–71. Available at: https://doi.org /10.1080/03004430.2016.1255607 (accessed March 2018). Borzekowski, D.L.G. (2018). A quasi-experiment examining the impact of educational cartoons on Tanzanian children. *Journal* of Applied Developmental Psychology 54: 53–9. Available at: https://doi.org/10.1016/j. appdev.2017.11.007 (accessed March 2018).
Save the Children. (2017). *IDELA: Fostering*

common solutions for young children. London: Save the Children. Available at: https://idelanetwork.org/resource/idela-fostering-commonsolutions-for-young-children/ (accessed March 2018). Wolf, S., Halpin, P., Yoshikawa, H., Dowd, A.J., Pisani, L. and Borisova, I. (2017). Measuring school readiness globally: assessing the construct validity and measurement invariance of the International Development and Early Learning Learning Assessment (IDELA) in Ethiopia. *Early Childhood Research Quarterly* 41: 21–36.

Think Future – a gathering of unlike minds in support of early years innovation

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Executive Director, Innovation Edge, Cape Town, South Africa Innovation Edge is a grantmaking and investment platform focused on the early years. We source and support unconventional ideas that seek to positively transform foundational life experiences for the 4 million young children under 6 who live below the poverty line in South Africa. Since 2014, we have built a pipeline of innovation, developing the processes and tools necessary to take an idea from conception to scale.

Our journey to date has included many valuable lessons, but perhaps most important of all is the profound importance of diversity in driving innovation. This was the motivation behind the inaugural Think Future event, which took place in Cape Town between 6 and 8 November 2017.

Think Future brought together 233 participants from 20 different countries (87% Global South). The event was structured around a series of disruptive inputs, drawing inspiration from five global forces driving massive change in the world today. The big idea: to spark action that results in children from all communities having the types of experiences that help them realise their full potential in the world they are going to live in. Quite purposefully, 40% of attendees were from outside of the 'traditional ECCE [early childhood care and education] sector'. Several of the attendees who were newer to the topic described the experience as 'being hit by the early childhood development bombshell'.

While there were many exciting take-outs from the event, two overarching themes emerged: Thinking Big(ger) and Thinking Simple(r).

Think Big(ger)

Hundreds of millions of young children globally face the very real risk of not realising their natural potential because of adverse conditions in childhood. Despite increasing acknowledgement of the importance of ECCE, the global response to early years challenges is very small in comparison to the size of the problem. We cannot continue to do what we have always done.

An opening presentation set the scene with a challenge to participants to 'chase the elephants, and not the mice'. Adopting a multi-sectoral approach opens up all sorts of exciting new opportunities for doing just this. Platform companies, for example, are rewriting the rule book for scale. Platform businesses, such as Uber and Airbnb,



[△] Photo: Innovation Edge

create value using resources they don't own or control and so are able to grow much faster than traditional businesses. Inspired by the disruption in accelerating technology (the 10× mindset), participants were encouraged to shift their thinking from incremental progress to exponential. They were tasked to consider how we could make better use of exponential technologies to alter the life course of the millions of children whose development is at risk.

Think Simple(r)

Neuroscience and economics provide persuasive arguments on the value of investing early, and on the ramifications of inaction. The diversity of the participant group at Think Future forced us to think about how we convey this message. Challenged by individuals who are not fluent in ECCE jargon, it became very apparent that we have to change the script. We need simple and clear messaging that helps us to bring the financiers, the techies, the city planners and business leaders on side. The early childhood message is compelling – we need to equip the messengers with the tools to carry the message beyond the converted.

So, how do we create a global early years movement based on simple and aiming for big? Dave Duarte of Treeshake shared his magic formula for stoking a movement. For a successful movement you need three classes of fire: Wildfires optimise messaging for emotion; Bonfires create a community around the issue; and Fireworks provide spectacular single moments that attract attention and create a sense of urgency.

The fire has been lit.

For more on Think Future, please visit www.innovationedge.org.za/think-future/