RESULTS the power to end poverty BUILDING BRAIN POWER Credit: UNICEF Madagascar/2014/Ramasomanana



BUILDING BRAIN POWER

Investing in young children to end global poverty

Ask children what they want to be when they grow up and answers will range from astronauts to movie stars, from teachers and doctors to professional athletes. Many children will receive the support needed to achieve their dreams, but for hundreds of millions of children in the poorest regions of the world, poverty and malnutrition will limit their potential before they ever set foot in a classroom. The right nutrition, care, and learning opportunities in the 1,000 days between a woman's pregnancy and her child's second birthday set the stage for children to reach their full potential. It is during this important window of time and the years immediately following, from birth to the first day of primary school, that the foundation is set for all future growth and learning. For the one quarter of a billion children around the world without adequate support, the clock is ticking. Certain types of brain development and neurological connections are gained or lost forever in the earliest years. As children grow into adults, making up lost ground becomes more costly and less effective.



Age-appropriate mental stimulation includes playing with, singing, and reading to children, as well as exposing them to shapes and colors. Programs that train and support parents and caregivers to deliver age-appropriate mental stimulation in the earliest years of life, alongside health and nutrition, are critical to giving children the chance to thrive.

A landmark study released by *The Lancet* in October 2016 revealed that **43 percent of children under the age of five are at risk of not reaching their developmental potential** in low and middle income countries. This amounts to 250 million children who lack access to proper nutrition, health care, age appropriate mental stimulation, a safe environment or more likely, some combination of all of the above. The numbers are even higher in Sub-Saharan Africa (66 percent) and South Asia (53 percent). Without an intervention in the first months and years of life, these children are more likely to remain at a disadvantage for the remainder of their lives.

The most successful interventions for young children address all four domains of development simultaneously - physical, linguistic, cognitive, and socio-emotional – by investing in nutrition, support for parents and caregivers, and early learning. When one developmental domain is threatened, it can negatively influence the rest. A scarcity of nutritious food, for example, can severely limit a child's growth, a phenomenon known as stunting.vi 159 million children (23 percent) in low and middle income countries suffer from stunting, an irreversible condition linked to inhibited physical and cognitive development which affects children's health, socio-emotional capacity, language skills, and ability to learn and thrive in school.vii As adults, children who experienced stunting and poverty are more likely to suffer from health issues and to earn less income, further perpetuating the cycle of poverty.viii

Investments in child development programs, especially for children in the lowest income brackets, yield high returns that benefit all of society. Children with access to quality interventions in the early years grow up to be adults who are healthier and more educated, and higher incomes, and are less likely to have run-ins with the law. Supporting these services will also yield high returns on investment down the line. For every \$1 invested in nutrition, a country can get \$16 in return. High-quality preschool programs that specifically target vulnerable groups can result in a rate of return of seven to 16 percent annually.

Ensuring that children receive the nutrition, support, and early learning opportunities in their earliest years is also important for the global economy. In April 2016, World Bank President Jim Yong Kim pronounced, "Providing early childhood development is both morally right and economically smart. How do we expect employers to invest in a country if its workforce is not sufficiently developed physically or cognitively? Governments that don't invest in a skilled, healthy, productive workforce are harming their future economic growth."xv

Developmental potential refers to the maximum level of mental and physical growth a child can achieve. When developmental potential is limited, it reduces the heights to which a child would normally be able to reach, impacting every aspect of a child's future.



To have the most impact for the youngest children, *The Lancet* recommends that programs should build off of existing systems that already reach young children and their caregivers. In many regions, health systems are especially well-placed to provide high-quality services that nurture and facilitate development. Successful investments should:

The Lancet identified nurturing care as the package of health, nutrition, security and safety, responsive caregiving, and early learning services that the youngest children need to thrive. Together, these interventions respond to young children's efforts to connect to and learn about their world and their families, which fosters brain development. Extreme poverty, conflict, and other societal or environmental problems can break down these connections, which makes policies and services that support young children's development crucial to securing their future success.

- Utilize existing systems Incorporate parent education and nutrition into existing healthcare systems, and nutrition and health curriculum into pre-primary education programs.
- Start early and often The first 1,000 days are crucial. Invest in programs and systems that support mothers and children from day one. Interventions with long durations and high frequency are the most successful.
- Educate caretakers Parents and caregivers, including healthcare workers, must be knowledgeable and responsive for children to feel safe, stay healthy, and grow cognitively.
- Ensure equity Programs should focus on reaching children, parents, and caregivers in the poorest regions who will benefit the most from interventions in the early years.
- Gather data To ensure quality programming and to identify best practices, high quality monitoring, evaluation, and data collection are essential.

Quality programs that integrate support for parents with a focus on nurturing care are estimated by *The Lancet* to cost an additional 50 cents per person per year. However, the cost of failing to address these challenges is much greater.

A child who fails to reach her development potential will experience, on average, the loss of one-quarter of her wages as an adult, making it harder for her to break the cycle of poverty. These losses extend to the societal level as well, where failure to invest early will result in higher costs down the road.

NURTURING CARE

SUCCESS STORIES

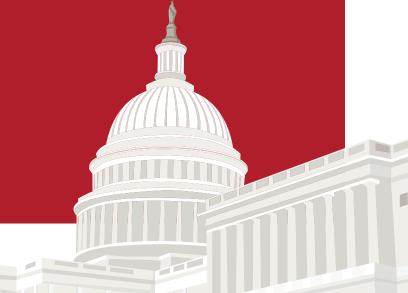
While programs that focus on the early years remain largely underfunded and under-prioritized, innovations from countries around the world illustrate successful models of investing in the early years:

- Nutrition and parent support In Pakistan, community health advocates known as Lady Health Workers visited mothers with infant children on a monthly basis. Those households that received nutrition supplements and caretaker education sessions on responsive stimulation and nutrition had children who showed higher cognitive, language, and motor scores at 24 months of age and had significantly better height-for-weight ratios.xvi
- Exclusive breastfeeding In Brazil, research showed that children who were breastfed for 12 months had more years of education, higher IQ scores, and higher monthly incomes at age 30 than children who were breastfed for less than one month.xvii
- Age-appropriate cognitive stimulation A study in Jamaica found that infants who
 were stunted but received regular weekly
 interventions focused on play and cognitive
 stimulation over a two-year period, developed stronger social and emotional skills,
 attended school for a longer duration, and
 earned 25 percent more income as adults
 than stunted children who did not receive
 the intervention.xviii
- Government commitment In Niger, 75 percent of the country lives on less than two dollars a day, one in three children are underweight, and nearly half of all households struggle with food security. To respond to this crisis, the government of Niger partnered with the World Bank and UNICEF to create a social safety net program specifically targeting women in the country's five poorest regions. Women enrolled in the program are eligible to receive \$20 USD per month for 24 months to improve food security and participate in monthly sessions led by local advocates. Sessions focus on essential early-years topics such as exclusive breastfeeding, nutrition plans, and cognitive stimulation. Additionally, many participants of the program choose to transfer a portion of their monthly stipend to a communal pool of funds which will later be used to provide the women of these regions with zero interest loans.xix

U.S. GOVERNMENT

Global leaders are increasingly recognizing the importance of investing early to break cycles of poverty and insecurity worldwide.** Program models exist for tackling this global challenge. U.S. support will be crucial, and should be prioritized within U.S. foreign assistance. A U.S. government agenda for young children globally will effectively and efficiently build on existing programs that increase the capacity of countries to deliver these services in the long-term. This agenda should:

- Strengthen and expand existing health and nutrition systems to include critical child development interventions, particularly parent and caregiver support. Through PEP-FAR, USAID Global Health, and Feed the Future, the U.S. government already supports health and nutrition systems that are often the first point of contact for pregnant women and children under five years of age. Evidence from low and middle income countries supports the feasibility of integrating programs that provide support to parents at low additional costs and have a positive effect on child development, without overwhelming health workers.xxi Parenting programs have been shown to directly improve cognitive and language development across a diverse array of policy, service delivery, and social contexts.xxii These entry points are also ideal to integrate identification of and response to developmental delays and disabilities.
- Expand the focus of USAID's basic education programming to include early learning. Foundational to the success of children in primary school, quality preschool programs in low and middle income countries have also been shown to improve children's cognitive development and provide psychosocial support.xxiii Investments should respond to the demand and context in each country, with a particular emphasis on: increasing equitable access to free, quality preschool programs for the poorest children; integrating health and nutrition services into preschool; providing technical assistance to governments for training early childhood teachers; and providing technical assistance to governments to develop and enforce a strong regulatory structure of formal and non-formal preschools and childcare centers to ensure quality.



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