

EARLY CHILDHOOD DEVELOPMENT FOR SUSTAINABLE DEVELOPMENT



CLCD

Center for Learning and Childhood Development
Advancing Research, Promoting
Learning and Saving Lives



**RESEARCH FOR
PRACTICE (R4P)**

“The true measure of a nation’s standing is how well it attends to its children: their health and safety, their maternal security, their education and socialization into societies in which they are born”

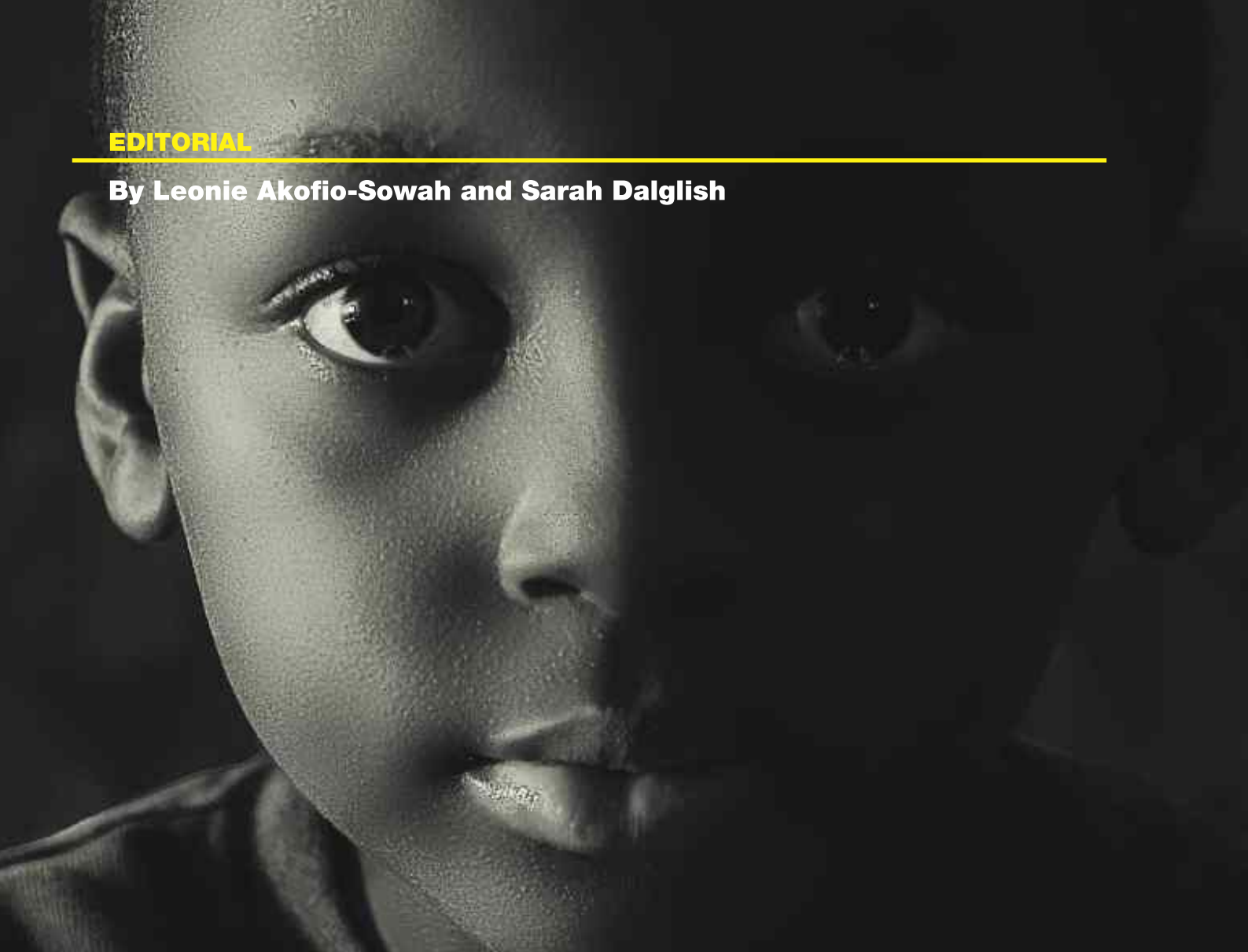
UNICEF 2007

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By Leonie Akofio-Sowah and Sarah Dalglish



An estimated 250 million children (43%) younger than 5 years in low and middle-income countries are at risk of not growing to their full potential due to challenges in their early, formative years, according to studies in the Lancet. In sub-Saharan Africa alone, about 115.5 million (81%) children are at risk of poor development.

The early years of a child's life are considered the most important developmental period, since they set the child's developmental trajectory and have effects throughout the life course. By age 5, children with healthy development develop a set of age-appropriate core intellectual, social, and emotional skills which enable them to maintain attention, understand and follow directions, communicate with others, and solve complex problems.

Early childhood development (ECD) is one of the most cost effective investments a country can make to promote healthy child development and improve children's lives now and throughout their lives. ECD promotes the physical, social, emotional and cognitive development of children during the early years of their lives.

There is evidence that ECD interventions reduce the long-term effects of poor early development in later adulthood such as poor health, low educational attainment, increased violence and crime, and a general loss of human capital. According to UNICEF, economic analyses from both low- and high-income settings indicate that investing in children's early years yields some of the highest rates of return to families, societies and countries.

For instance, the 43% of children estimated to be at risk of poor development due to extreme poverty and stunting would grow up to earn about a quarter less than average yearly adult income.

At country level, this translates to losses to gross domestic product up to double what is currently spent on health. The case for investment can therefore be made not only with respect to returns but also to the cost of inaction.

Investment in rigorous research on the delivery of early childhood interventions and their outcomes is essential for improving ECD programs. The Center for Learning and Childhood Development – Ghana (CLCD), through its Research for Practice Project (R4P), aims to make such research on early childhood development more understandable and accessible to educators, health workers, parents and policy makers. We hope that improved understanding of research findings on children's health and development will advance advocacy and facilitate translation of research evidence to practice.

This magazine provides a review and lay summary of early childhood-related research articles. Articles summarized here are mainly from the 2016 Lancet Early Childhood Development Series, however we also draw from research studies and national surveys on ECD in Ghana, particularly on challenges facing early childhood education and regional and socio-economic disparities. The lay summaries provided do not necessarily reflect the views of the authors of the various studies.

At CLCD, we believe all children have the right to healthy development. We seek to bring partners together to make this right a reality – in Ghana and around the world. We welcome you to join the conversation!

Sources:

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ABOUT US

The Center for Learning and Childhood Development – Ghana (CLCD) is a research-based, non-profit organization that designs and implements solutions for children's survival and development.

We partner with organizations and institutions to pursue priority research, programmatic and policy needs in early childhood development.

The Center focuses on the urban poor and rural residents, the population with poorer early child development outcomes and where research indicates the greatest impact could be made.

Currently, its program areas are in maternal, neonatal and child health, developmental delays and disorders, early child education and basic education.

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WHY IS EARLY CHILDHOOD DEVELOPMENT IMPORTANT?

Early Childhood Development: The Foundation of Sustainable Development

Summarized by: Kathleen Lee and Lisa Gee



In 2017, the Lancet released a Journal Series on “Advancing Early Childhood Development: from Science to Scale.” The series provided an overview of the status of early childhood development in low- and middle income countries.

The series was commissioned because since the first Lancet Series on Child Development in Developing Countries in 2007, scientific publications had increased greatly; one-third of the countries in the 2007 publication had adopted policies on early childhood development, and funding for it had increased. This required a re-examination of the research and programs of early childhood development to date.

Based on the review of the current literature, this paper emphasized the significance of the first 2-3 years of life to children's development, and the long-term consequences of poor early development in later adulthood.

The paper pointed to new, scientific research which showed that genetic, biological, and environmental influences beginning at a baby's conception affected early childhood development and carried across the rest of the child's life.

There was evidence from the series that a program that sought to increase brain development of stunted children in Jamaica, 25 years ago, resulted in a significant 25% increase in average adult earnings.

In that same study, growth failure (stunting) in the first 2 years of life had harmful effects on later adult health and social outcomes, such as chronic disease, less educational attainment, and lower adult earnings.

Such disadvantages continue into the next generation, and therefore, result in lost adult earnings and the continuation of poverty over time. Considering this cycle of poverty, the researchers emphasized that programs to improve early childhood development have the potential to transform early child development programs in low- and middle-income countries and help achieve the Sustainable Development Goals (SDGs).

The study recommended an all-inclusive early childhood development program for both pregnant women and young children. They stressed that interventions need to include caregivers and children at sensitive times, particularly from conception to 2-3 years.

Despite the growth in evidence supporting the impact of early childhood programs, the authors noted that more progress is needed as services for early childhood development are usually fragmented and have varying quality levels. Furthermore there were few larger scale programs, and evaluation of these programs was poor.

Daelmans, Bernadette, et al. "Early childhood development: the foundation of sustainable development." The Lancet 389. 10064 (2017): 9-11.

Summarized by: Swati Sudarsan and Jessica DeRuiter



Children born and raised in poverty have an increased risk of not reaching their full potential due to lack of care and or resources. Early childhood development and intervention can help these children reach their full potential on multiple levels. Children who are not well supported during their early development are less likely to be successful as adults.

This article summarized the key points from a Lancet series on advancing early childhood development. One main point is that nurturing care should be the basic right of every child because it is fundamental to a child's development. Nurturing care is a concept that includes a set of activities and protections that promote healthy child development from conception through the first 1000 days. It consists of good nutrition, adequate care, provision of learning opportunities from birth onwards, and protection from disease, violence and stress.

Another point was that resources to support children's development should focus on the most disadvantaged families that struggle to provide nurturing care for their children. Disadvantaged families included those who lived in extreme poverty and those who required humanitarian assistance.

Systems in these settings were to be made resilient against the disruptive influence of natural disasters and violence/conflict.

Moreover, the authors advocated investment in rigorous research on the delivery of interventions and their outcomes (both long and short term) as this is essential for improving early child programs. In addition, robust and valid indicators were recommended to be developed to assess the cognitive and socio emotional development of children.

The paper also recommended that resources should be allocated deliberately across countries and regions with strong partnerships across public and private sectors, academia, civil society, professional associations, foundations, donors, and local communities.

The authors of this report made a commitment to make early childhood investments, policies, and programs an important part of their support to the countries in which they operated.

Overall, this Lancet series was important because it ultimately established that reaching children is a necessity for sustainable development and that it is a collective goal and responsibility to provide this service to children around the world so that they can all reach their potential.

Chan, Margaret, Anthony Lake, and Keith Hansen. "The early years: silent emergency or unique opportunity?." *The Lancet* 389.10064 (2017): 11-13.

WHAT IS THE STATE OF THE PROBLEM GLOBALLY AND IN GHANA?

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

Summarized by: **Corinne Sakyi**

What is the context for this research?

Over the years, researchers and policymakers have become increasingly aware of the importance of child development. Despite the immense improvements in child survival, many developing countries are still faced with the challenge of reducing children's risk for poor development.

The 2007 Lancet series on early child development (ECD) estimated that in 2004, 219 million children under the age of 5 years were unable to reach their developmental potential. Using the most updated data for stunting and extreme and moderate poverty, the 2016 Lancet study provided a global, regional and country level updated estimate of the prevalence of children at risk for poor development for the years 2004 and 2010.

How was the research conducted?

The 2016 study used data from 141 low- and middle-income countries. The data was compiled using World Bank estimates, individual country poverty measures and other estimates made on a country-by-country basis.

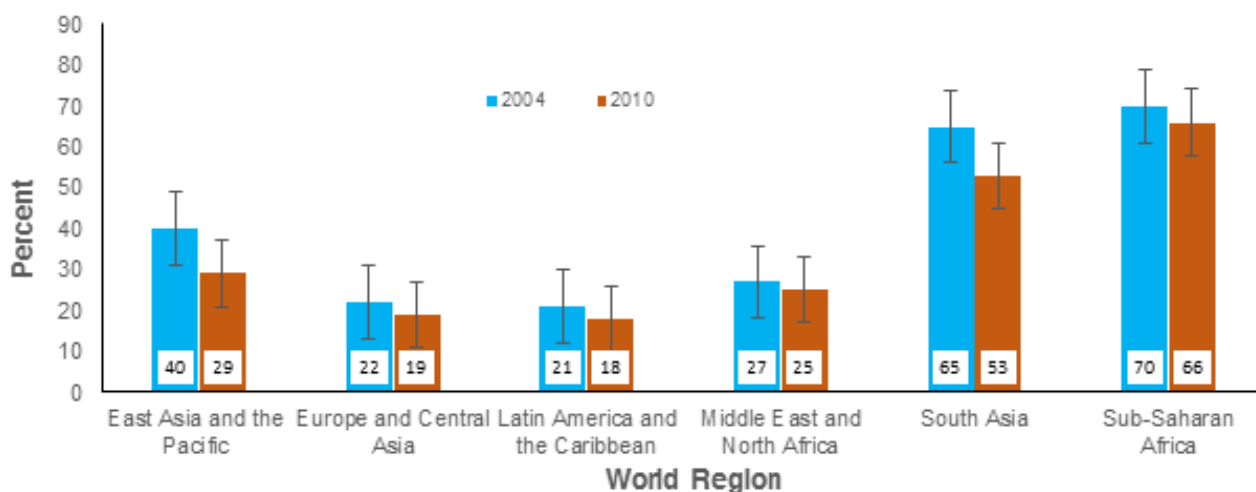
What were the main findings?

The study demonstrated that children at risk for poor development included those living in moderate and extreme poverty and those who were stunted—i.e., extremely shorter than other children of the same age and gender.

From 2004 to 2010, the prevalence of children at risk of poor development declined from 51% to 43% in low and middle-income countries. Stunting similarly decreased from 30% to 25% during the same period.

Globally, sub-Saharan Africa had the least change and continued to have the highest rates of children at risk for lifelong difficulties. 55 million (38%) of children in Sub-Saharan Africa were stunted; 72 million (50%) of children lived in extreme poverty (lived on <1.25 USD/day) and 115.5 million (81%) were at risk of poor development. This made sub-Saharan Africa perhaps the most vulnerable region of the world for the safety and the health of children.

Figure 1:
Regional Estimates (in percentages) of children at risk of poor development in 2004 and 2010 using extreme poverty (\$1.25)



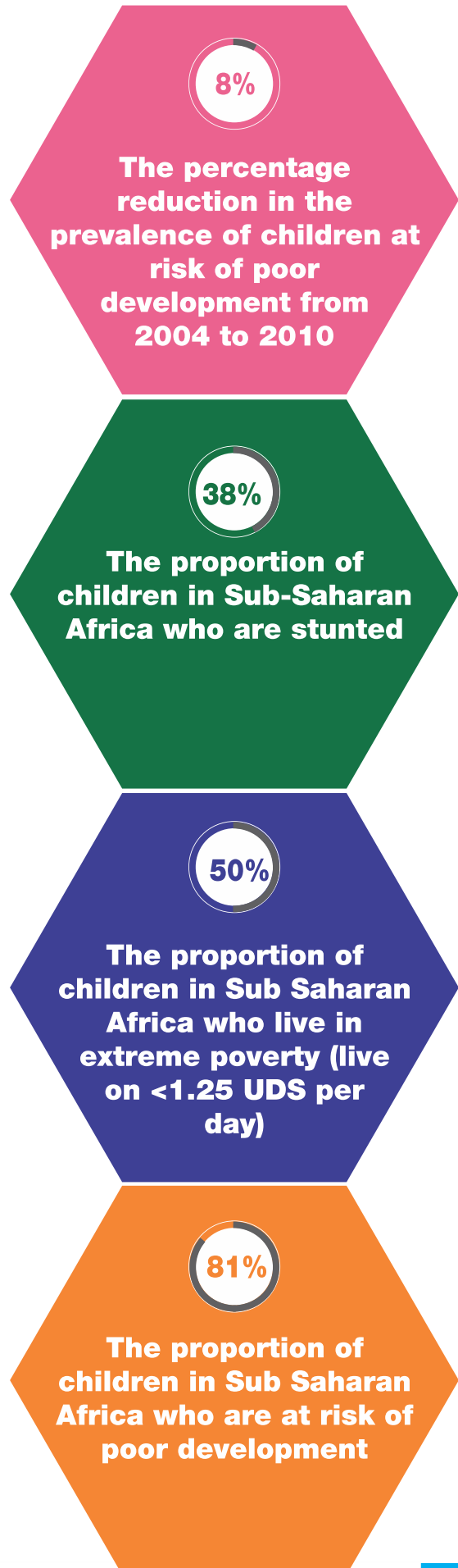
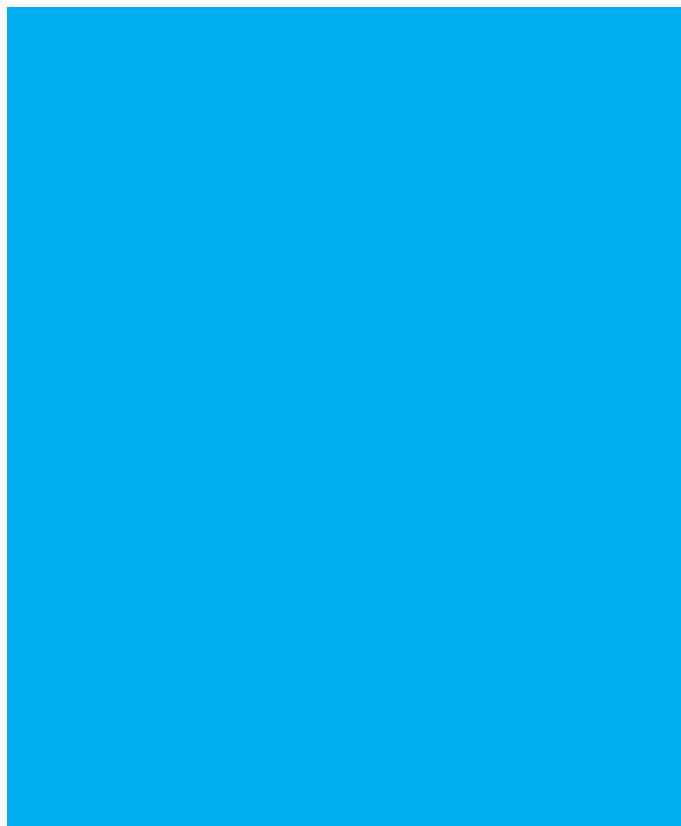
What were the study's conclusions or recommendations?

Even though these results seemed encouraging, the paper revealed that much more progress is required in order to identify and reduce the number of countries at risk for poor childhood development.

A major challenge identified by the study was the absence of an international standard for identifying at-risk children.

This made it difficult to get accurate estimates of stunting and poverty rates. Furthermore, many factors that were likely to contribute to poor childhood development such as access to school, level of maternal education, violence in the home, maternal depression, and adverse environmental conditions were not included in this data set.

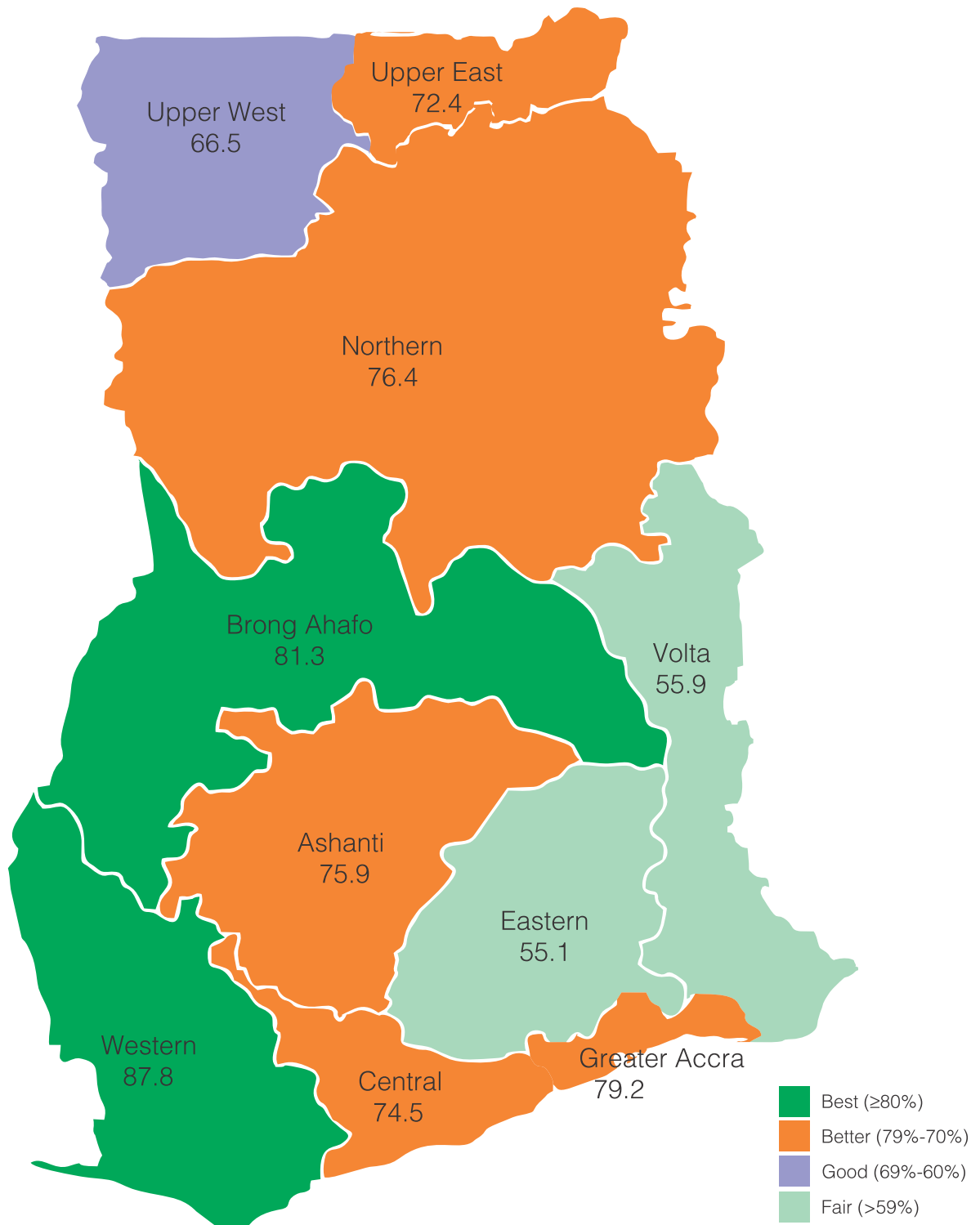
Lu, Chunling, Maureen M. Black, and Linda M. Richter. "Risk of poor development in young children in low-income and middle-income countries: an estimation and analysis at the global, regional, and country level." The Lancet Global Health 4.12 (2016): e916-e922



EARLY CHILDHOOD DEVELOPMENT IN GHANA

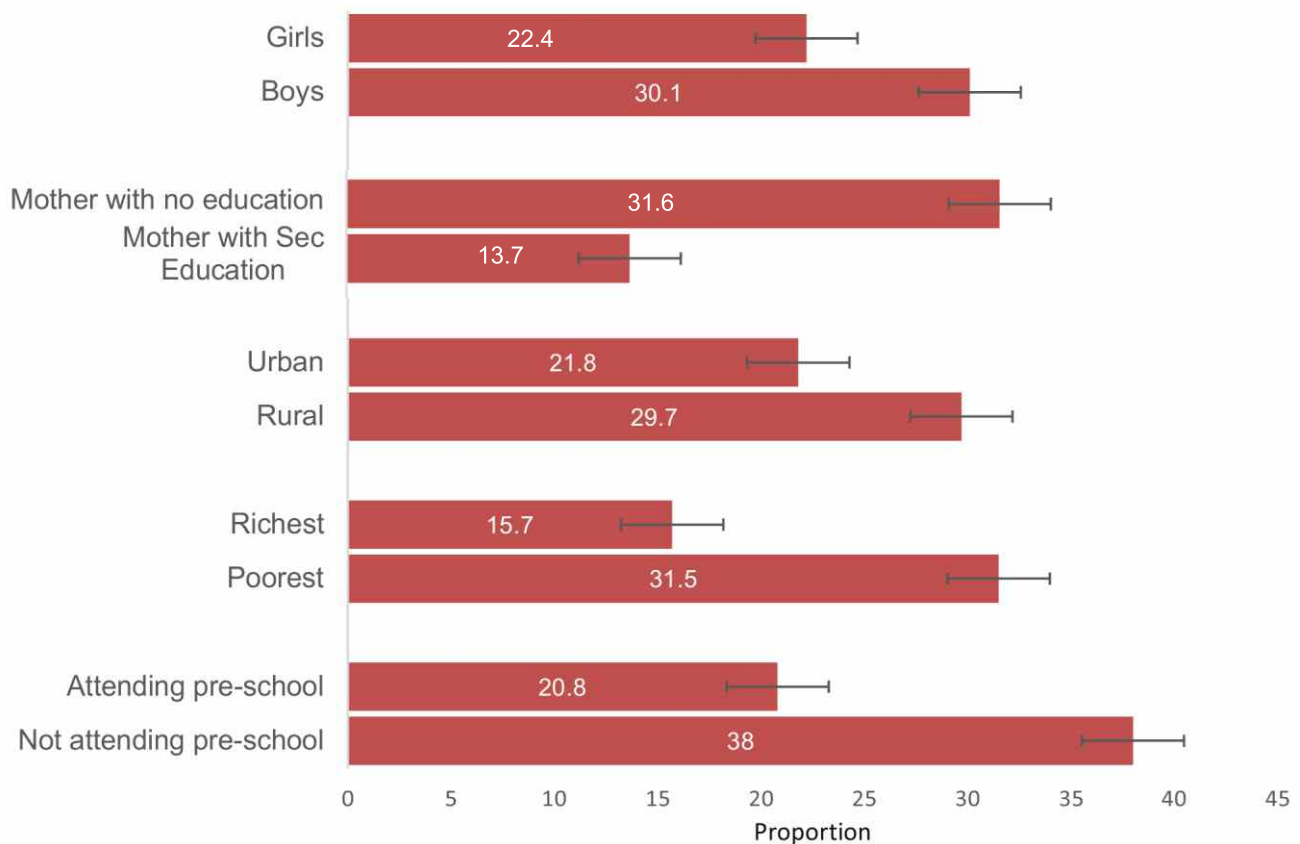
Even though about 74 % of children aged 36-59 months in Ghana are developmentally on track, regional disparities exist with the Western Region having the highest early childhood development index (88%) and the Eastern Region having the lowest early childhood development index(55%)

Figure 2:
Proportion of children aged 36-54 months who are developmentally on track in Ghana



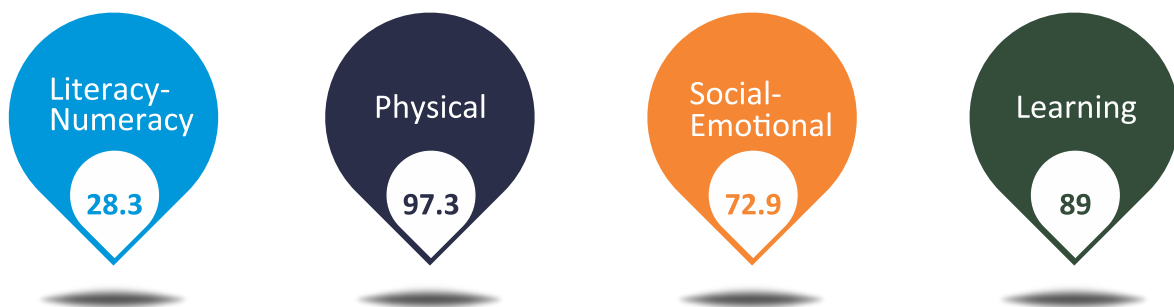
Children in Ghana with the least early childhood development index are those who are not attending preschool (38%). Besides, mothers with no education have more than twice as many children who are developmentally not on track as compared to mothers with secondary education.

Figure 3:
Proportion of Ghanaian children aged 36-54 months who are developmentally not on track, by socio-demographic variables



The Multiple Indicator Cluster Survey (2011) shows that while 97 percent of children aged 36-59 months are developmentally on track in the physical domain, much less are on track in learning (89%), social-emotional (73%) and literacy-numeracy (28%).

Figure 4:
Percentage of children aged 36-54 months in Ghana who are developmentally on track based on the four main developmental domains



Generally there has been a decrease in net enrollment of children aged 0-3 years in crèche/nursery from 2001 to 2014 except in Accra where there has been an increase of 1%. The Western and Volta regions have the steepest decline of 9% and 7% respectively.

Figure 5:
National and regional percentage change in net enrollment of children aged 0-3 years in crèche/nursery, from 2001 to 2014

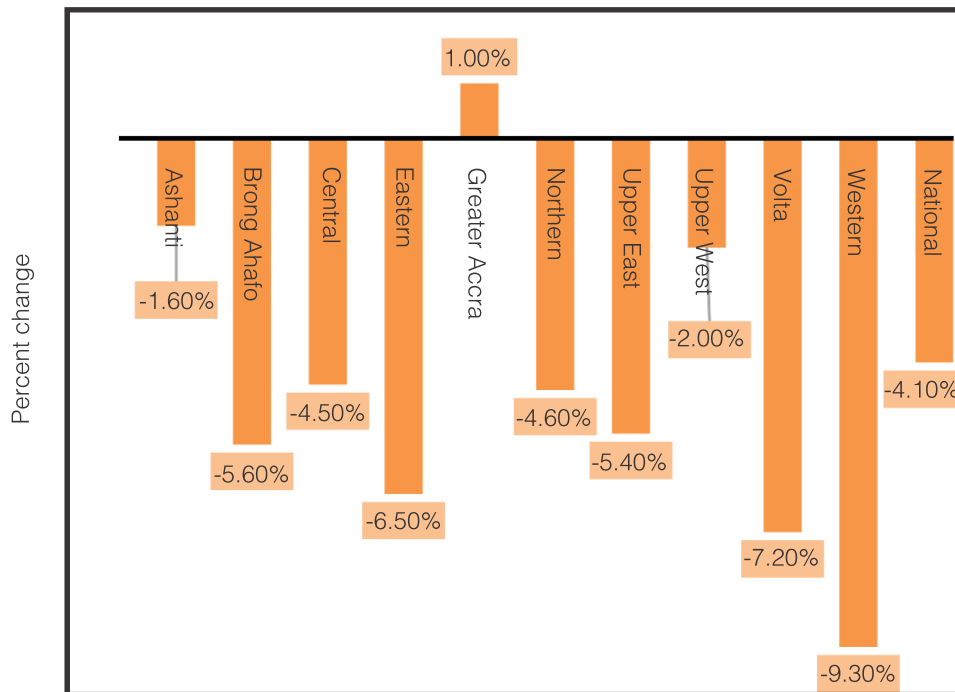
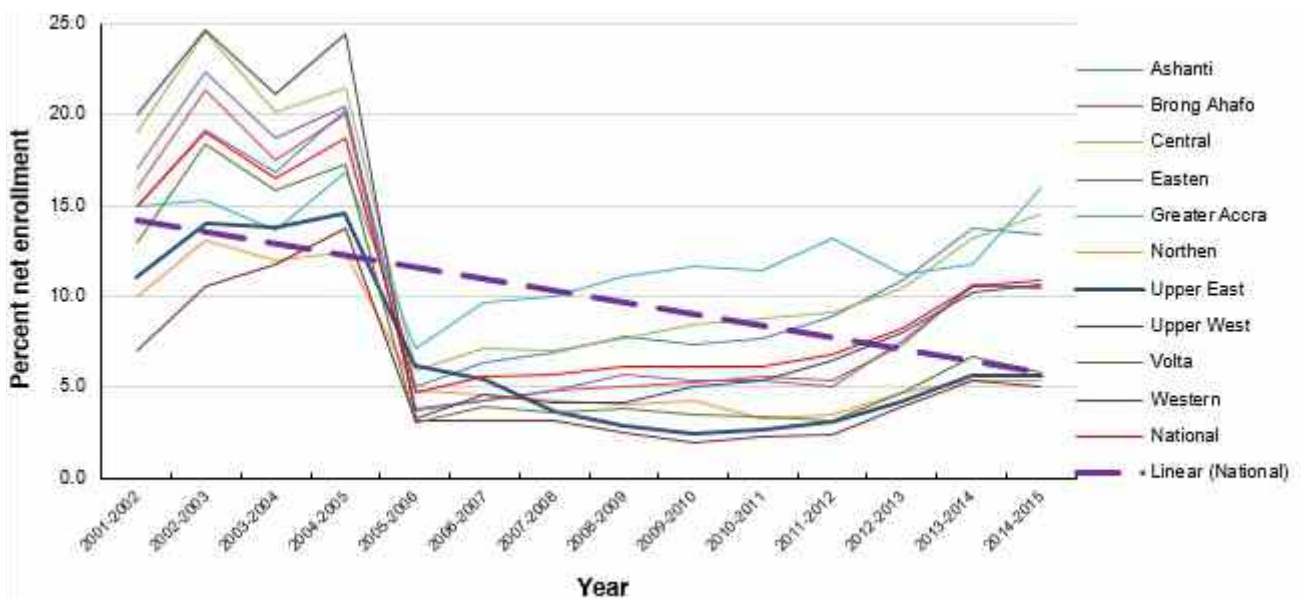


Figure 6:
National and regional variations in net enrollment of children aged 0-3 years in nursery/creche in Ghana, 2001-2015



Sources:

Ghana Statistical Service, 2011. *Ghana Multiple Indicator Cluster Survey with an Enhanced Malaria Module and Biomarker, 2011, Final Report*. Accra, Ghana.

Ministry of Education, 2016. *Basic Education Statistics*. Available from URL: <http://www.moe.gov.gh/emis/html/basic.htm> [Accessed date: January 5, 2017]

WHAT ARE THE CHALLENGES FACING EARLY CHILDHOOD EDUCATION IN GHANA?

Challenges Facing Early Childhood Education in Ghana. What do Stakeholders Say?

Summarized by: Katherine Lee and Lisa Gee



What is the context for this research?

In 2003, Ghana adopted an Education Strategic Plan that included an early childhood education (ECE) policy which aimed at improving the skills and competencies of children. Since then, ECE programs in Ghana have remained a top priority for children's social, physical and mental development. While the benefits of ECE in national development have been well documented, more attention is needed regarding the challenges that affect their successful implementation. This study aimed to gather information from stakeholders about the challenges that affect early childhood education in Ghana

How was the research conducted?

The study was conducted in the Winneba municipality of the central region of Ghana. Seventeen participants consisting of the National Coordinator of Early Childhood Education, heads/proprietress in early childhood education, teachers/early childhood educators and parents were included in the study. The study used one-on-one interviews and focus groups to collect feedback on challenges in early childhood education.

The questions were aimed at gathering information on what challenges exist, what factors contribute to these challenges, and recommendations to address these challenges.

What were the main findings?

The study identified public prejudice about the relevance of ECE to the total educational development of the child as a challenge. These prejudices were based on the persistent societal stereotypes about the essence, relevance, status and levels of intelligence of teachers involved in ECE. Below is a quote from one of the early childhood educators interviewed in the study.

“They don't see why people should be trained with degrees to handle children in kindergartens. They believe we go there to sing songs and recite rhymes. For most people, early childhood educators can only sing and clap. People wonder why we should be wasting our time at that level when in actual fact we could be making productive use of our time at the higher basic levels”

Also, inadequate parental involvement and commitment to ECE were identified as challenges mainly by early childhood educators and heads of early childhood institutions. Furthermore, the limited number of teaching staff and teacher quality as well as the limited or no infrastructure and learning materials were also identified as major challenges. Below is a quote from one of the parents interviewed in the study.

“I think on the issue of class size it is a problem. Looking at where my baby is, when I go there I don't feel comfortable because the school has one big classroom with three levels of pupils in the same classroom. When you enter the class there is total confusion because whiles one section is reciting a poem, another group is singing or counting numbers. I once asked the teacher in the school that do the children get or understand what she is teaching and she said yes. Even though I didn't want to argue with her I knew the children could not pay attention because of the noise”

In addition to these, poor management and ineffective supervision of early childhood education programs and a lack of government support for early childhood education programs were identified as challenges.

The researchers found that these challenges were as a result of the inadequate understanding of early childhood education. The whole concept of ECE in terms of what it entails, its practices, and its relevance to the total education and development of children was still not well understood by the Ghanaian populace.

What were the study's conclusions or recommendations?

The overall recommendation was the need for a robust educational and sensitization program for the public about the important role of ECE in the child's educational development.

Other notable recommendations were that more effort should be made to encourage parental participation and partnership in ECE programs; individuals managing this area in district, regional, and national offices should have a background of studies and experience in ECE; and the government should show more commitment and support for early childhood education programs in addition to ensuring larger and more timely funding for these programs.

The study suggested that future work in this area encourage and foster collaboration between local institutions such as the community and early childhood centers in the use of local resources.

Abdulai, Ahmed. "Challenges Facing Early Childhood Education In Ghana. What Do Stakeholders Say?" Advances in Social Sciences Research 1.3 (2014)

Early Childhood Education in Ghana: Perceptions of Stakeholders in the Western Region of Ghana

Summarized by: **Dasheema P. Jarrett**

What is the context for this research?

Early Childhood Education (ECE) refers to educational programs which focus on children from birth to eight years. Even though ECE programs in Ghana have remained a top national priority many Ghanaian stakeholders believe that more could be done to improve ECE programs in the country. The purpose of the study was to investigate the perceptions of the stakeholders in early childhood education and determine if these perceptions affect their performance in the implementation of early childhood education programs.

How was the research conducted?

The study collected information from ECE stakeholders: parents who had children in early childhood centers, community members, and early childhood educators in eight districts in the Western region of Ghana. They used questionnaires and interview guides to collect information on the opinions of ECE stakeholders and to determine how these opinions affected the performance of their roles in implementing ECE policies. The data collected was then summarized using statistical tools.

What were the main findings?

A total of 1,200 stakeholders were interviewed for the study. Majority were government officials (401), parents (300), teachers (342) and community members (111). There were very few Religious groups (3), non-governmental organizations (15) and district assemblies (28). Generally, the study found that stakeholders in the Western Region had low opinions about ECE programs. Some of these opinions included:

1. Belief that teaching at a preschool could be done by any teacher;
2. Parents involvement in ECE had little impact on a child's performance; and

3. Preschool was a place where very little learning took place and that ECE programs had little effect on childhood development and learning.

The study also found that the low opinion of stakeholders in the region negatively affected the performance of their roles in ensuring effective implementation of early childhood programs in the region. For instance, the low perceptions about ECE in the region had led to limited support to such programs in terms of provision of financial resources, play kits, and learning materials.

What were the study's conclusions or recommendations?

Based on the study conducted, the researchers recommended that the government increases teacher, parent and stakeholder's awareness on ECE programs and policies. Non-governmental organizations, religious groups and District Municipal Assemblies were also encouraged to increase their involvement with developing ECE programs as this could provide a solid foundation for ECE.

Lemaire, Margaret B., et al. "Early Childhood Education in Ghana: Perceptions of Stakeholders in the Western Region of Ghana." Early Childhood Education 4.9 (2013).

WHICH INTERVENTIONS WORK?

Nurturing Care: Promoting Early Childhood Development

Summarized by: Elizabeth Weage and Leonie Akofio-Sowah



What is the context for this research?

About 43% of children under-five in developing countries are at risk of not growing to their full potential. Poverty, severe malnutrition, and exposure to armed conflict are key reasons why many children do not reach their full potential.

This study sought to identify interventions to improve children's development in the early years (0-8years). The researchers reviewed interventions in five main areas: health, nutrition, education, child protection and social protection.

How was the research conducted?

The study reviewed multiple research papers from studies in countries such as Bangladesh, Jamaica, and Pakistan and summarized the results.

What were the main findings?

The study found that it was better for intervention packages to combine nurturing care with other sector specific programs. Nurturing care implied a stable environment that provides children with their health and nutritional needs, emotional support and protection from harm.

Nurturing care combined with other programs in health, nutrition, child and social protection, and child care and learning could improve child developmental outcomes.

For example, including stimulation (talking, singing, and playing) in nutrition programs could improve developmental outcomes, which could not be fully promoted through nutrition interventions alone.

The study also found that interventions needed to focus on the entire life course of a child. They were necessary at all the stages of childhood development: pregnancy, birth and the newborn period, infancy, and early childhood. Interventions prior to birth included measures to improve maternal healthcare and nutrition such as iodine supplementation during pregnancy, magnesium sulphate for women at risk for pre-term birth, aspirin for women at risk of high blood pressure as well as psychological support for mothers.

Evidence from the study revealed that psychological support and interventions provided by community health workers for mothers with depression showed an improvement in their moods and their ability to care for their infants. Furthermore, providing pregnant women with iron supplements reduced their risk of premature birth.

Interventions that occurred after birth included parenting support, effective breastfeeding and healthy nutrition, protection from harm and access to high quality childcare in both formal and informal preschools.

These interventions had positive impacts on children's growth.

For instance the study found that, parenting support including at home visits and group sessions resulted in positive effects on children's language and brain development. Also, breastfeeding supported healthy nutrition as well as infant-mother bonding. Teenagers who were breastfed had higher intelligence quotient (IQ) scores.

The study proposed three intervention packages which focused on aspects of nurturing care as well as the entire life course of the child. These were: the family support and strengthening package which aimed at equipping families to provide nurturing care; the multi-generational nurturing care package which focused on the care and protection of parents' physical and mental health while enhancing their ability to provide nurturing care for their children; and the early learning and protection package which combined parental support and the assistance of teachers' and caregivers' in order to create a nurturing environment in early childhood centers, classrooms, and community settings for learning.

What were the study's conclusions or recommendations?

The paper concluded that early child development interventions were most effective when they combined nurturing care with other child development interventions. There was evidence that interventions which focused on the entire life course of a child resulted in long-lasting positive effects on child development. Moreover, the study stated that interventions focused on improving children's early years should be able to target the specific challenges facing children in a particular environment.

Even though the study identified interventions that are effective, more work is needed to be done to understand how successful these interventions would be especially in conflict affected and fragile countries.

Britto, Pia R., et al. "Nurturing care: promoting early childhood development." The Lancet 389.10064 (2017):91-102

Nurturing care implies a stable environment that provides children with their health and nutritional needs, emotional support and protection from harm

Early child development interventions are most effective when they combine nurturing care with other child development interventions

There is evidence that interventions which focus on the entire life course of a child result in long-lasting positive effects on child development

INDICATORS OF KEY INTERVENTIONS RELEVANT TO EARLY CHILDHOOD DEVELOPMENT IN GHANA



Nurturing care: It consists of good nutrition, adequate care, provision of learning opportunities from birth onwards, and protection from disease, violence and stress. Only 6 % of households with children under-five have 3 or more books available. Besides, only 41% of children aged 0-59 months have 2 or more playthings in their homes.

Source: Ghana Statistical Service, 2011. Ghana Multiple Indicator Cluster Survey with an Enhanced Malaria Module and Biomarker, 2011, Final Report. Accra, Ghana.

HOW DO WE SCALE UP INTERVENTIONS?

Investing in the foundation of sustainable development: Pathways to scale up for early childhood development

Summarized by: Neha Naithani

Interventions to benefit early childhood development are essential to ensure children around the globe reach their lifetime potential in terms of dignity and equality and pass on benefits to the next generation. This is at the heart of the Sustainable Development Goals. Scientific evidence shows conception to age 3 is where the most harm or benefit can occur. Successful early childhood development interventions which can be integrated into existing health and education systems are available. This paper argued that there were risk factors apart from stunting and poverty which led to poor childhood development, so the issue was more widespread than estimated. The study described steps for successful expansion and “scale up” so that these interventions could be delivered to a larger number of children. ation and financing.

The researchers studied the underestimation of poor childhood development by analyzing data from 15 countries. With added low maternal schooling and child maltreatment, the risk of children being stunted or in extreme poverty increased from 63% to 75%. There were additional factors which impacted childhood development, such as armed conflict, displaced families, parents living with HIV, and mothers with depression. Interventions required consistent delivery from preconception to early childhood to have the greatest impact – there was a conceptual framework identifying key interventions needed to achieve this.

The authors identified steps for successful expansion of childhood development programs. The first was political prioritization and financing. After reviewing ten programs from developed and developing countries, they concluded that successful programs needed political concerns about inequality and poverty, scientific and economic evidence, wide-ranging services for children and families, and funding and leadership from a government agency working with other departments.

The second step was passing laws and policies which increased access to and quality of health and other services, money, and time for parents to care for their children.

The third step was creating effective delivery systems. The paper identified points in health services at which interventions had been effectively incorporated. Local adaptation of services, adequate staff training, ensuring quality of care by careful expansion, and continuous improvement were essential. The fourth step was monitoring and supervising the coordination between various departments.

The authors suggested the designation of a UN Advisor for Early Childhood Development to make the issue important and promote accountability. The last step was affordability. The authors estimated the costs for integrating two childhood development interventions into existing healthcare packages to be about \$34 billion. They also estimated the cost of not protecting children or promoting their development – in middle and low income societies, 43% of these at-risk children would grow up to earn about a quarter less average adult income yearly. At country level, that could be a loss of up to 2 times the gross domestic product spent on health.

The estimated costs for integrating two childhood development interventions into existing healthcare packages is \$34 billion.

43% of the children estimated to be at risk of poor development would grow up to earn about a quarter less average of adult income yearly. At country level, that could be a loss of up to 2 times the gross domestic product spent on health.

Richter, Linda M., et al. "Investing in the foundation of sustainable development: pathways to scale up for early childhood development." *The Lancet* 389.10064 (2017): 103-118.

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