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Starting strong: Why early childhood care and development matters in the Philippines

Valerie Gilbert T. Ulep, Lyle Daryll D. Casas, and Suzy M. Taparan

The years between birth and age four are critical for nurturing the future of learners. As underscored in the Philippines' Early Years Act of 2013 (Republic Act [RA] 10410), investing in early childhood care and development (ECCD) can address various aspects of children's growth, including their cognitive, physical, emotional, and social development.

To ensure every child has the best possible start, ECCD programs encompass these critical components: access to high-quality early education, adequate health care, nutrition, responsive caregiving, and a safe and secure environment.

These components are interrelated and indivisible. For instance, good nutrition can affect how young children fare in school. Research has shown that effective early childhood nutrition interventions lower the age of school start, improve reading comprehension and nonverbal cognitive ability test results, and boost the chance of earning more later in life (Orbeta and Paqueo 2022). By prioritizing ECCD, governments not only pave a brighter future for young children; they also promote long-term economic growth.

However, for many years, the country has missed its targets on two fronts. First, the Philippines remains one of the hotspots of child malnutrition. Second, participation in early childhood education continues to be low.

This *Policy Note*, which is based on existing research, looks into the connection between health and nutrition, the opportunities

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Salient Points:

- Investing in health and nutrition as early as from conception to early childhood—that critical stage where the brain develops at its most rapid pace—produces learners who are likely to complete school, reach their learning potential, and live productive lives.
- Prekindergarten participation remains low as many parents believe their children are still "too young to go to school". Meanwhile, early childhood schools are inequitably distributed as the ratio of prekindergarten schools/programs per 10,000 children is lowest in the poorest municipalities. Data on the quality of the programs are scant, too.
- ▶ Stunting (chronic undernutrition) and wasting (acute undernutrition) continue to hound Filipino children under the age of five. Stunting prevalence in the Philippines is among the highest in the ASEAN region. The nation will also be at risk of missing its Sustainable Development Goal of reducing the proportion of children suffering from wasting to under 3 percent by 2030 if no evidence-based intervention is done. Stunting remains high all these years because of undernutrition during pregnancy, child nutritional deficiency during 0-23 months, and childhood illnesses. On the other hand, wasting is caused by inadequate quantity and quality of food intake, aggravated by food insecurity.

for early child education, and the underlying factors that are slowing down progress in ECCD in the Philippines. It then provides recommendations on how to address the identified areas for improvement.

Where are we now?

Opportunities for early education: Low uptake in prekindergarten schooling

In the Philippines, the law requires that children aged five years and above start their K-12 formal education in kindergarten. Meanwhile, the younger ones, although not mandated by law, are brought to daycare centers or preschools (or other modalities) for early childhood education. Here, they begin to "learn how to learn" and engage in activities that enable them to interact and form relationships with parents, peers, and teachers. According to the Annual Poverty Indicators Survey in 2019, however, the participation of children ages three to four years in prekindergarten programs in both public and private schools was low at around 40 percent (Figure 1). This finding is consistent across all income groups, including children from richer families.

The disparity in preschool attendance is evident when data are compared across regions. There was relatively higher prekindergarten participation from the National Capital Region (NCR), Region VII, and Region IV-A; in contrast, participation was very low in Region XI and the Autonomous Region in Muslim Mindanao.¹



Figure 1. Proportion of children ages 3–4 in schools by wealth quintile (2011 and 2019) and region (2019)

¹ Now called the Bangsamoro Autonomous Region in Muslim Mindanao

Nutrition and health: The necessity of starting them very young

The ability to excel later in school cannot be credited exclusively to quality education. Other factors during young children's 1,000 days² define their capacity for lifelong learning and well-being. Overwhelming evidence suggests that improvements in health and nutrition can produce short-term benefits to children's cognitive skills and long-term impacts on their school performance and soft skills (Barnett 1995; Nores and Barnett 2010).

In the Philippines, however, one has yet to see significant improvements in its major nutrition outcome indicators. Around 3.7 million—or almost one in every three—children under five years old are chronically undernourished (or "stunted"), characterized by a height that is too short for the age in children ages 0–59 months). The Philippines' 29-percent prevalence of stunting in 2019 is among the highest in the Association of Southeast Asian Nations (ASEAN) region, next only to Lao PDR and Indonesia (Ulep et al. 2023).

Bringing down the stunting rate is crucial as it is a predictor of poorer cognitive and learning outcomes (Branca and Ferrari 2002; Crookston et al. 2011) and lower wages (Barker 2005; LaFave and Thomas 2016).

Over the last three decades (1990–2018), the stunting prevalence in the Philippines gradually improved, declining by about 0–1 percent annually. However, this trend still pales in comparison to the decline in the rates of its neighbors in the region, including some of the low- and middle-income nations. Viet Nam, for instance, recorded a 5–6 percent annual drop in the stunting rate (Figure 2). From the 1990s to 2015, Viet Nam managed to reduce its stunting prevalence three-fold (Ulep et al. 2023).



Figure 2. Under-5 stunting rates in selected ASEAN countries, 2000-2020

ASEAN = Association of Southeast Asian Nations; PDR = People's Democratic Republic Source: Ulep et al. (2023)

 $^{^{\}rm 2}$ Includes the moment they are conceived until they reach two years of age

The large inequity across socioeconomic classes magnifies the country's problem with stunting. In 2015, about 49 percent of the poorest Filipino children were stunted compared to 14 percent of their richest counterparts (UNICEF et al. 2021). The 35-percentage point absolute difference between the rates of the poorest and the richest children counts the Philippines among the countries with the highest level of disparity (Ulep et al. 2023).

Across the nation's 17 regions, the disparity among socioeconomic levels is glaring. In the NCR, a highly urbanized region, the difference in the prevalence of stunting between the richest and the poorest children is about 20-percentage points. It is worse in ARMM, where the prevalence among the poorest children is even higher than the countries with notoriously high stunting prevalence. One can likewise observe this growing divergence in the stunting rates of the poorest and richest children even during their critical first 1,000 days. That is, this divergence in rates begins to accelerate starting from the young children's 6th month until the 24th month (Figure 3).

Such findings along socioeconomic lines thus beg the question: What appropriate interventions, particularly for poor young children, can address this divergence as early as their first 1,000 days?

Wasting, or acute undernutrition, on the other hand, is when a child's weight is low for his/her height. It is characterized by the loss of body fats and muscle tissues and brought about by a lack of nutrition over a shorter period (Caulfield et al. 2006).

The trends in wasting prevalence of children under 5 and 5–10 years old had not moved much in the past 30 years. Both rates hovered above 5 percent as of 2019. Without interventions, the country will be unable to even hit the Sustainable Development Goals by 2030.





However, it is worth noting that the wasting prevalence among children under 5 years old significantly dropped from 2013 to 2018. From 8 percent in 2013, the rate fell to 5.6 percent in 2018 (FNRI 2014, 2018). The 2018 figure is slightly lower than the 6.1-percent prevalence for the Asia-Pacific region and the lowest in Southeast Asia, except for Singapore and Brunei (OECD 2022).

Why are we here?

This section looks at the reasons for the challenges in (a) early childhood education and (b) health and nutrition that have ramifications on young children's health in general and brain development in particular.

Early childhood education: Areas of disconnect

The low prekindergarten participation in the country may be partly explained by parents' perception of early childhood education. Ninety-eight percent of parents believed their children aged 4–5 were "too young to go to school", according to the results of the Functional Literacy, Education and Mass Media Survey (PSA 2019b). Thus, these children might have been kept home rather than sent to a prekindergarten school/program. However, there are no available data that can indicate whether these children, while at home, were given positive learning stimuli.

The survey result makes one wonder how much parents know (or do not know) about how ECCD programs can benefit their children's well-being and learning experience.

Meanwhile, prekindergarten enrollment is partly a function of the number of facilities that can accommodate very young children. In 1990, RA 6972 mandated every barangay to set up a daycare center with a "total development and protection of children program".

Today, there are 56,400 daycare centers in the country. These facilities are not equitably distributed because first-class municipalities possess the highest number of daycare centers per 10,000 children aged 3–4, while the lowest income (i.e., sixth class) municipalities have the least number of daycare centers per 10,000. Also, around 14 percent of local government units, particularly low-income municipalities, have yet to set up their centers (DSWD 2022).

Equally important as access to ECCD centers is the quality of the programs. However, while guidelines and standards for center-based early childhood programs exist, there is not enough data on quality to carry out an analysis.

Undernutrition: Why the first 1,000 days matter

The persistent chronic undernutrition in the country stems from three causes discussed below.

Chronic undernutrition

a. *Undernutrition during pregnancy*. Limitations on the mother's physical attributes and nutritional deficiency can impact fetal growth in utero. Thus, children born to mothers who are undernourished and short in stature are also likely to be chronically malnourished (Ulep 2021).

In the Philippines, poor-income women are likely to bear a child at a young age, which is also the life stage where high undernutrition exists. In 2015, 11 percent of Filipinos—particularly young adolescents (30%)—were undernourished (Ulep 2021).

b. Child nutritional deficiency during 0–23 months. To lower mortality and the likelihood of stunting, infants should be fed only breast milk during their first 6 months. However, only about half of the children aged 0–5 months (54.9%) were exclusively breastfed in 2018 (FNRI 2018). Moreover, only 13 percent of children aged 6–23 months met the minimum acceptable diet (MAD) in 2018. This means that most children at this stage did not have a diversified diet, nor did they meet the minimum meal frequency required.

Low MAD and exclusive breastfeeding rates indicate suboptimal feeding practices in children, increasing their likelihood of becoming undernourished. c. *Childhood illnesses*. Infections affect children's nutritional status by causing a decrease in food intake, impairing nutrient absorption, and increasing metabolic requirements or catabolic losses of nutrients, among other effects. Children, particularly those from low-income families exposed to recurrent infection (e.g., diarrhea, pneumonia), are more likely to be chronically malnourished. According to the 2017 National Demographic and Health Survey, children from the poorest 20 percent are twice as likely to have diarrhea and pneumonia compared to their rich counterparts. This may also be caused by poor access to healthy water and sanitation facilities. (PSA and ICF 2018).

Acute undernutrition

Wasting indicates a recent or short-term nutrient deficiency but is the most life-threatening subform of malnutrition (UNICEF n.d.). The prevalence of wasting can suddenly climb due to such factors as recent illnesses, food insecurity, and the family's feeding behaviors and practices (for example, a mother's failure to exclusively breastfeed her baby up to the latter's sixth month).

Food insecurity, in particular, is a pervasive concern with far-reaching implications. In 2018, around 54 percent of households in the Philippines were reported to be food insecure. These numbers worsened during the COVID-19 pandemic in 2020; a survey of select households reported that around 62 percent were food insecure (FNRI 2018; 2020).

The lack of access to nutritious food can lead to a diet with little nutritional value or too often-skipped meals. Hunger challenges undernourished learners' ability to take on physical activities seriously. Children experience difficulty concentrating and are less able to attend school (Chinyoka 2014).

What must we do to move forward?

To support young children's well-being and learning potential, effective health and nutrition services should be delivered as part of a continuum of interventions that are comprehensive, convergent, and continuous (3Cs). First, all health and nutrition services needed during the critical development period of young children should be provided as a single package (comprehensive). Second, the delivery of cost-effective programs or initiatives should be integrated with services other than those under "maternal and child health" to promote interventions that advance multisectoral collaboration (convergence). Third, the interventions should be delivered in a connected manner, so that the referral process from the community to primary care facilities (e.g., rural health units) and hospitals will be seamless (continuity). Hence, the genuine implementation of the Universal Health Care Act, in which primary health care is at the front and center, is pivotal in implementing the 3Cs of health and nutrition services.

Moreover, one cannot overemphasize improving access to early education. Given the findings of various studies mentioned in this Note, the government is urged to explore the following policy conjectures:

- a. Sustain capital and human resource investments to address inequities and scarcity of child development centers (CDCs).
- b. Explore innovative approaches to delivering early education, especially in resource-constrained settings:
 - Integrate ECCD into existing health and nutrition programs to leverage existing resources and infrastructure. A comprehensive ECCD package focusing on health, nutrition, early stimulation, and child protection may be integrated, which is done in other countries.
 - ii. Explore public-private partnerships (PPPs). The Philippines could start with looser forms of PPP (i.e., those service and/or management contracts that are more flexible or collaborative) between the sectors of community-based organizations and local governments to provide ECCD services. Further, tighter forms of PPP (i.e., those that involve a more formal and regulated approach

requiring high technical expertise and complex financing arrangements) could be explored to deliver early childhood education, but this requires more reconnaissance studies.

- iii. As a stop-gap measure, the government has implemented a mobile program that provides childcare services; the governments could develop ECCD centers that use low-cost, locally sourced materials and train community members to deliver ECCD services.
- c. Address demand-side challenges on the behavior of parents in early education.
 - i. Educate parents and caregivers on the importance of ECCD through community outreach programs and awareness campaigns.
 - ii. Provide support services to families (e.g., parental leave, flexible work arrangements, affordable childcare options).
 - iii. Implement policies that promote access to ECCD services, including making preprimary education free and compulsory and expanding the availability of quality early learning programs.
 - iv. Support the development of innovative ECCD programs tailored to young children involving their families (e.g., home-based learning programs).

References

Barker, D.J.P. 2005. Infant growth and income 50 years later. *Archives of Disease in Childhood* 90(3):272–273.

Barnett, W.S. 1995. Long-term effects of early childhood programs on cognitive and school outcomes. *The Future of Children* 5(3):25–50.

Branca, F. and M. Ferrari. 2002. Impact of micronutrient deficiencies on growth: The stunting syndrome. *Annals of Nutrition* & *Metabolism* 46(1)8–17.

Caulfield L.E, S.A. Richard, J.A. Rivera, P. Musgrove, and R.E. Black. 2006. Stunting, wasting, and micronutrient deficiency disorders. In *Disease control priorities in developing countries*, edited by D.T. Jamison, J.G. Breman, A.R. Measham, G. Alleyne, M. Claeson, D.B. Evans, P. Jha, and A. Mills. 2nd ed. Washington, DC: International Bank for Reconstruction and Development and World Bank. https://www.ncbi.nlm.nih.gov/books/ NBK11761 (accessed on April 19, 2023).

Chinyoka, K. 2014. Impact of poor nutrition on the academic performance of grade seven learners: A case of Zimbabwe. *International Journal of Learning and Development* 4(3):73.

Crookston, B.T., K.A. Dearden, S.C. Alder, C.A. Porucznik, J.B. Stanford, R.M Merrill, T.T. Dickerson, and M.E. Penny. 2011. Impact of early and concurrent stunting on cognition. *Maternal* & *Child Nutrition* 7(4):397–409.

Department of Social Welfare and Development (DSWD). 2022. Administrative data on child cevelopment centers. Quezon City, Philippines: DSWD.

Food and Nutrition Research Institute (FNRI). 2014. 2014 Expanded National Nutrition Survey. Taguig City, Philippines: FNRI.

———. 2018. 2018 Expanded National Nutrition Survey. Taguig City, Philippines: FNRI.

———. 2020. 2020 Rapid Nutrition Assessment Survey. Taguig City, Philippines: FNRI.

- LaFave, D. and D. Thomas. 2016. Height and cognition at work: Labor market productivity in a low-income setting. Working Paper No. 22290. Cambridge, MA: National Bureau of Economic Research.
- Nores, M. and W.S. Barnett. 2010. Benefits of early childhood interventions across the world: (Under) Investing in the very young. *Economics of Education Review* 29(2):271–282.
- Orbeta, A. and V.B. Paqueo. 2022. Philippine education: Situationer, challenges, and ways forward. Discussion Paper Series 2022-23. Quezon City, Philippines: Philippine Institute for Development Studies. https://pidswebs.pids.gov.ph/CDN/document/ pidsdps2223.pdf (accessed on April 19, 2023).
- Organisation for Economic Co-operation and Development (OECD). 2022. Society at a glance: Asia/Pacific 2022. OECD. Readers' guide. OECD library website. https://www.oecd.org/els/societyat-a-glance-asia-pacific-24089168.htm (accessed on April 19, 2023).
- Philippine Statistics Authority. 2011.Annual Poverty Indicators Survey. Quezon City, Philippines: PSA.
- ———. 2019a. Annual Poverty Indicators Survey. Quezon City, Philippines: PSA.

——. 2019b. Functional Literacy, Education, and Mass Media Survey (FLEMMS). Quezon City, Philippines: PSA.

- Philippine Statistics Authority (PSA) and ICF. 2018. Philippine National Demographic and Health Survey 2017. Quezon City, Philippines, and Rockville, MD: PSA and ICF.
- Republic Act 6972. 1990. Barangay-Level Total Development and Protection of Children Act. Metro Manila, Philippines: Congress of the Philippines.
- Republic Act 10410. 2013. Early Years Act of 2013. Metro Manila, Philippines: Congress of the Philippines.
- Ulep, V.G. 2021. Breaking the curse: How do we address chronic malnutrition in the Philippines? PIDS Policy Notes 2021-02. Quezon City, Philippines: Philippine Institute for Development Studies.
- Ulep, V.G., J. Uy, L.D. Casas, M.V. Capanzana, A. Nkoroi, R.G. Galera Jr., M.E. Carpio, and F. Tan. 2023. The determinants of the

socioeconomic inequality and the trajectory of child stunting in the Philippines. PIDS Discussion Paper 2023-04. Quezon City, Philippines: Philippine Institute for Development Studies. https://pidswebs.pids.gov.ph/CDN/document/ pidsdps2304.pdf (accessed on April 19, 2023).

- United Nations Children's Fund (UNICEF). n.d. Nutrition and care for children with wasting: Treating children with the most life-threatening form of malnutrition. https://www.unicef.org/ nutrition/child-wasting (accessed on April 19, 2023).
- United Nations Children's Fund (UNICEF), World Health Organization (WHO), and The World Bank Group. 2021. Levels and trends in child malnutrition: UNICEF/WHO/The World Bank Group joint child malnutrition estimates: Key findings of the 2021 edition. https://www.who.int/publicationsdetail-redirect/9789240025257 (accessed on April 19, 2023).

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PIDS Policy Notes are analyses written by PIDS researchers on certain policy issues. The treatise is holistic in approach and aims to provide useful inputs for decisionmaking.

Valerie Gilbert T. Ulep, Lyle Daryll D. Casas, and Suzy M. Taparan are senior research fellow, research specialist, and consultant, respectively, at PIDS. The views expressed in this publication are those of the authors and do not necessarily reflect the views and policies of PIDS or any of the study's sponsors.

Contact us

Address:	Research Information Department Philippine Institute for Development Studies 18/F Three Cyberpod Centris - North Tower EDSA corner Quezon Avenue, Quezon City
Telephone:	(+63-2) 8877-4000
Email:	publications@pids.gov.ph
Website:	www.pids.gov.ph