

LAO PDR EARLY CHILDHOOD EDUCATION PROJECT

SNAPSHOT TWO: CHILD HEALTH AND NUTRITION

This snapshot summarizes preliminary findings related to child health and nutrition from the Early Childhood Education (ECE) Study in Lao PDR. The ECE Study was initiated to evaluate the Early Childhood Education Project. The results presented here represent data collected on the status of child health and nutrition prior to the implementation of the project. Data will be collected again after the project has finished to see if the project has improved outcomes for children. This snapshot highlights that child undernutrition is a serious public health issue in Northern Laos PDR.

Good health and nutrition are essential not only for children's survival, but for healthy development and growth. Health and nutrition lay the foundation for development throughout childhood, in turn impacting on later learning, educational achievement and adult productivity. To promote holistic child development, a basis of good health and nutrition for the country's children is critical.

THE EARLY CHILDHOOD EDUCATION PROJECT

The ECE Project seeks to support the expansion of quality ECE services with the objective of improving the overall development and school readiness of children aged 3-5 years in disadvantaged villages across the country (for further information, refer to Snapshot One: Project Background and Baseline Data Demographics). Good health is essential in promoting development, and as such the ECE Project incorporates interventions designed to improve child health and nutrition to better support overall child development. Community awareness campaigning and parental education will aim to improve knowledge and understanding of what is needed for good child health, while the provision of school lunches aims not only to promote healthy eating and better nutrition, but to improve school attendance and children's concentration.

Baseline data were collected to provide information on the current status of child outcomes, including indicators of child health and nutrition. Here we present findings on breastfeeding, undernutrition and vaccination coverage.



The results are based on data collected from 7,520 children and their caretakers in the Northern provinces of Lao PDR: Phongsaly, Oudomxay, Houaphanh, Xaiyabouly and Borlikhamxay.

BREASTFEEDING

Not only does breastfeeding provide infants with nutrition for healthy growth and development, it also reduces infant mortality and provides protection against disease and infection. It is recommended by the World Health Organization (WHO) that children be exclusively breastfed for the first six months of life. Thereafter, children should receive complementary foods with continued breastfeeding up to two years of age or beyond.

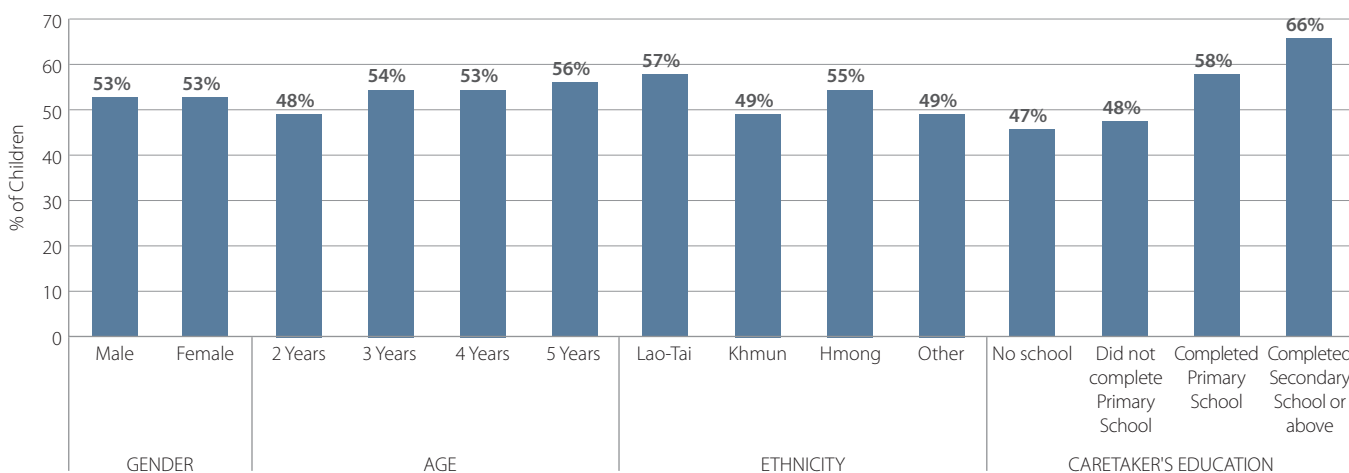
Almost all children in the survey (99%) had been breastfed. For the small number of children that had not been breastfed, this was mainly due to their mother not having enough milk (<1%), or because they had been adopted by another family (<1%). For children who had been breastfed, the majority were breastfed until they were 7–12 months old (27%) or 13–24 months old (62%). The remainder were breastfed from 1–6 months old (4%), 25–36 months old (7%) and 37–60 months old (1%). Overall, 89% of children were breastfed beyond 6 months of age. The most common reasons mothers stopped breastfeeding were due to the child reaching an age when they felt that they should no longer be breastfed (50%), because the mother

had to work (23%), was either pregnant or wanted to be pregnant (12%), or because the child did not want their mother’s milk anymore (6%).

Of all children assessed, 53% were exclusively fed breastmilk until at least 6 months of age, 68% were breastfed beyond 12 months of age, and just 8% were breastfed up until two years old and beyond. Worldwide, about 36% of infants are exclusively breastfed until 6 months of age, and WHO has set a global target to increase this rate to at least 50% by 2025. Encouragingly, the children in the baseline sample have already exceeded this target.

Figure 1 shows that when looking at breastfeeding rates more closely, there are disparities across ethnicity and family background. In particular, more Lao-Tai children were exclusively breastfed until at least 6 months of age than Khmun and Hmong children. Further, educated parents were more likely to exclusively breastfeed their children for at least six months than parents who had never been to school.

FIGURE 1. CHILDREN WHO WERE EXCLUSIVELY BREASTFED UNTIL AT LEAST 6 MONTHS OF AGE





UNDERNUTRITION

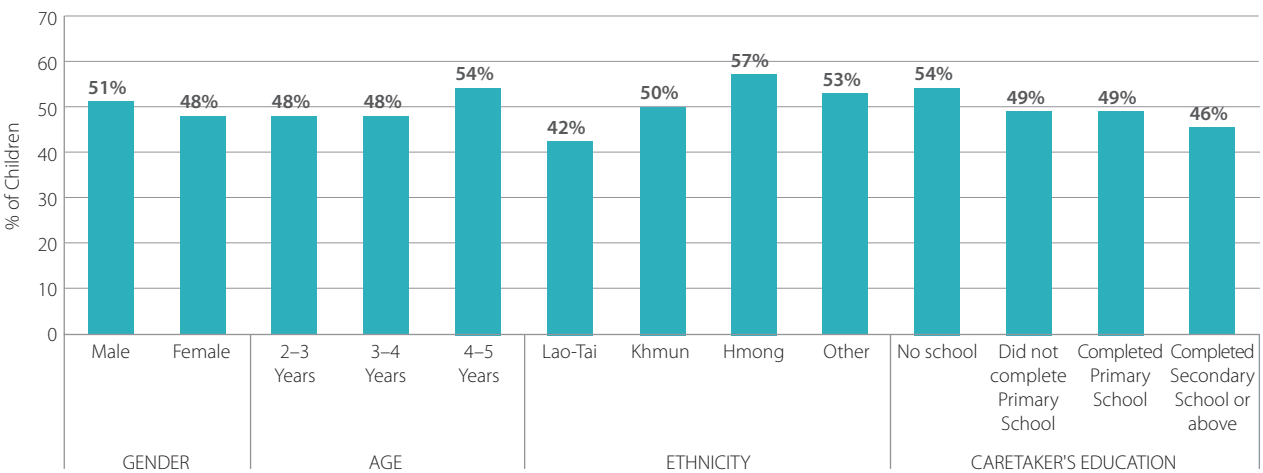
Children's height and weight was measured to calculate the presence of stunting, wasting and underweight. Stunting refers to a child being too short for his/her age; it is the failure to grow both physically and cognitively and is the result of chronic or recurrent undernutrition. Wasting refers to a child who is too thin for his/her height, reflecting recent sudden weight loss or acute undernutrition, usually as a result of starvation or severe disease. Underweight can imply stunting, wasting or both. Table 1 presents the overall prevalence of these three forms of undernutrition alongside the degree

of public health significance according to the WHO classification system.

TABLE 1. PREVALENCE OF UNDERNUTRITION AND PUBLIC HEALTH SIGNIFICANCE

FORM OF UNDERNUTRITION	% OF CHILDREN	WHO CLASSIFICATION
Stunting	50	40+ = 'very high' public health significance
Wasting	9	5-9 = 'medium' public health significance
Underweight	27	20-29 = 'high' public health significance

FIGURE 2. CHILDREN WHO WERE STUNTED





Child stunting is classified as a very high public health concern in Northern Lao PDR. Stunting is largely irreversible and can have detrimental consequences in later life, such as poor motor and cognitive skills, leading to reduced adult productivity. These findings are interesting to reflect on when considering the results

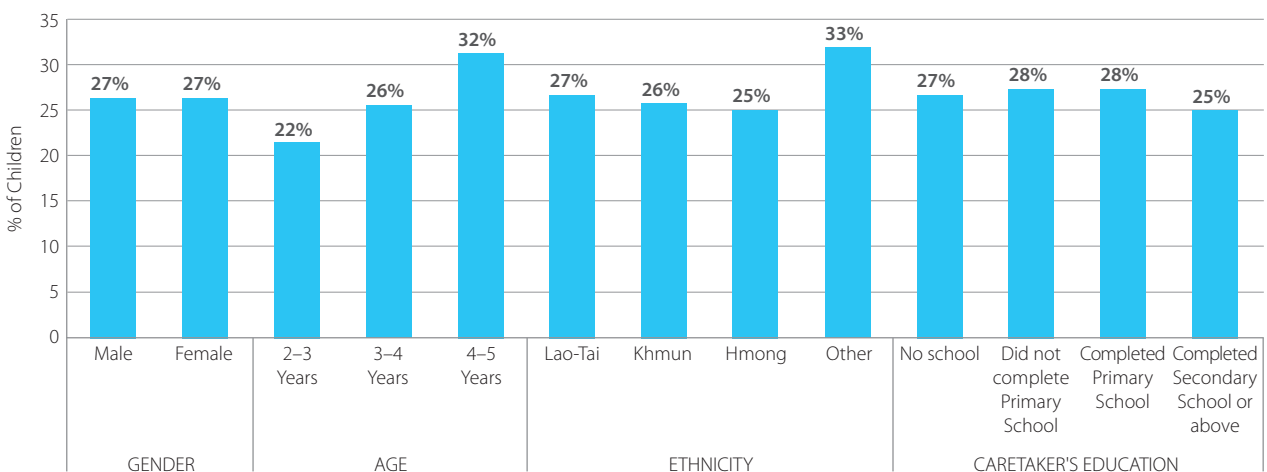
reported in Snapshot One of this series of reports, which indicated that only 2% of households reported food shortages for more than two consecutive days over the last 12 months. Either households were unwilling to admit to their level of food insecurity, or there is a lack of variation and quantity of food being provided to young children, resulting in such high rates of stunting.

When examining stunting in greater detail, disparities across age, gender, ethnicity and family background emerge, as shown in Figure 2. More children from Khmun, Hmong and other ethnicities were stunted than Lao-Tai children, and children whose parents had some form of education were less likely to be stunted than children whose parents had never gone to school.

Wasting at the level found in this study would be considered a medium public health concern according to the WHO universal growth standards. If wasting goes unidentified and untreated, the condition progresses severely, requires specialized nutritional rehabilitation and greatly increases the risk of child mortality.

As Figure 3 shows, when examining wasting more closely, while there were no gender differences there were differences across age, ethnicity and family background. Children from other ethnicities (a combination of Prai, Phong, Akha, Lao, Leu, Yang, Cingmoon, Kmer, Toum, Singsili, Hor and Ilmain – please refer to Snapshot One for further details) were most likely to be wasting. Slightly more Lao-Tai children were found to be wasting than Khmun and Hmong children. Finally, while fewer children whose parents had completed secondary school or

FIGURE 3. CHILDREN WHO WERE WASTED





above were wasting, there was very little variation in the proportion of children wasting among those whose parents had not gone to school, had gone to school but not completed primary school, or had completed primary school.

VACCINATIONS

More than half of caretakers reported they had their child's vaccination card (56%); 29% were able to present their child's vaccination card but without the details recorded on it, and 28% presented a vaccination card that did have information recorded on it.

Examining only the responses from caretakers who were able to present their child's vaccination card, we are able to estimate that up to 24% of children had their BCG vaccine for tuberculosis, 20% had been vaccinated against Measles, 22% had been fully vaccinated against both Polio and DPT (three doses of each), and while 12% of children had received two doses of the Hepatitis B vaccine, no children had received all three doses and were therefore not fully vaccinated against the infection. It is likely that children of families who did not have, or who were unable to provide, an immunization card have had no immunizations at all, or likely at a



lower coverage than those families who were able to present an immunization card. Table 2 below presents vaccination results by age with an upper and lower estimate of the coverage. This information is then presented against the WHO recommended routine vaccinations for all children.

Figure 4 shows large variations in vaccination coverage across child age, ethnicity and family background. These differences were much bigger than those of breastfeeding and undernutrition rates. Among children

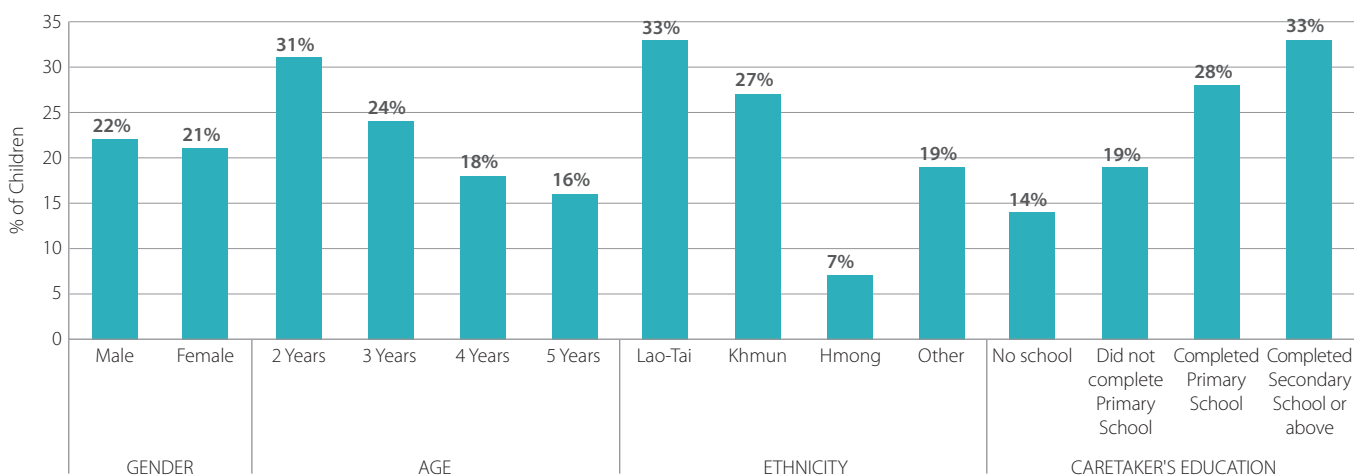
were much less likely to be vaccinated against Polio than Lao-Tai, Khmun and children of other ethnicities. Further, children of parents who did not go to school were much less likely to have had their Polio vaccinations than children whose parents had some form of education. Polio immunization largely varied by age, with more than double the amount of 2 year olds vaccinated than 5 year olds. Hopefully this is a reflection that programs designed to increase immunization coverage are gaining more traction.

TABLE 2. VACCINATION COVERAGE BY CHILD AGE AND WHO VACCINATION RECOMMENDATIONS

VACCINATION	AGE	LOWER ESTIMATE OF CHILDREN VACCINATED	UPPER ESTIMATE OF CHILDREN VACCINATED	WHO RECOMMENDATION
BCG	2	10%	34%	Age of first and only dose as soon as possible after birth.
	3	8%	27%	
	4	6%	20%	
	5	5%	19%	
Measles	2	8%	18%	Age of first and only dose, 9 or 12 months.
	3	6%	21%	
	4	5%	17%	
	5	4%	15%	
Polio (3 dosages)	2	9%	31%	Minimum 6 weeks old at first dose, then 4–8 week intervals between second and third dosages.
	3	7%	24%	
	4	5%	18%	
	5	5%	16%	
DPT (3 dosages)	2	9%	31%	Minimum 6 months old at first dose, then minimum 4–week intervals between second and third dosages.
	3	7%	24%	
	4	5%	19%	
	5	5%	17%	
Hepatitis B (2 dosages only)	2	5%	13%	First dose as soon as possible after birth, then minimum 4–week intervals between second and third dosages.
	3	4%	17%	
	4	3%	9%	
	5	3%	9%	

Note: The upper and lower bounds are estimated taking into account the families that were unable to provide an immunization card.

FIGURE 4. CHILDREN WHO WERE FULLY VACCINATED AGAINST POLIO





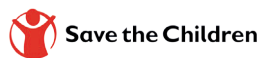
KEY FINDINGS AND RECOMMENDATIONS

This study finds that children in the northern parts of Lao PDR are not receiving the health services and nutrition that they should be. Despite meeting the WHO global target for exclusive breastfeeding until 6 months of age, there is still room for improvement in the breastfeeding rates in Northern Lao. The rates of stunting and children being underweight are of high public health significance. Additionally, the rates of immunization are well below international standards. These figures are consistent with previous research studies conducted by non-government organizations and the World Bank in Lao PDR. The ECE Project has the potential to support improvements in child health and development through the community awareness campaign. The campaign includes a focus on the importance of the first 1,000 days of life, immunization and good nutrition. It will be extremely important that the community awareness campaign is effectively implemented and that the key messages are delivered clearly and successfully to families living in the communities of Northern Lao PDR.



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For more information about the ECE Project, visit:

<http://www.worldbank.org/projects/P145544/lao-prd-early-childhood-development-project?lang=en>

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