



LIVES CUT SHORT



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Rate of child deaths due to
undernutrition in the Philippines
now higher than global average

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Mark Anthony, 1 year and 8 months old, gets his mid-upper arm circumference measured by health workers as part of the assessment of his nutritional status during a CMAM program activity in Navotas.

This is an executive summary report showing results of the study commissioned by Save the Children Philippines, in collaboration with the Food and Nutrition Research Institute (DOST-FNRI).

The Philippines has seen a steady decrease in the under-five child mortality in the past decades. From a child mortality rate of 42 per 1,000 live births in 1998, it is now down to 27 per 1,000 live births in 2015.¹ This means that 27 out of 1,000 Filipino children die before reaching the age of 5 –slow but steady progress.

With scant primary and domestic evidence on the relationship of undernutrition with child mortality in the Philippines, health and nutrition professionals, government agencies and civil society organizations have relied on international averages to develop nutrition policies, identify intervention and allocate budgets. This research is the first Philippines-specific analysis of national hunger and undernutrition as an underlying determinant to Filipino child mortality, and to provide recommendations on strategies and interventions that can further improve child survival nationally.

The study included 11,554 children from 8,857 mothers and 8,510 households. This study used data from the 2015 Updating Survey of Nutritional Status of Filipino Children and Other Population groups, which includes data on child mortality, household food security (includes food availability, accessibility, utilization and stability), meal frequency and diet diversity, maternal health factors, child nutritional status, feeding practices, illness status, and, socio-demographic characteristics. The said survey is conducted every 2 to 3 years after a National Nutrition Survey by the DOST-FNRI, which collects information on the nutrition situation across the Philippines. The study estimated the number of deaths attributable to undernutrition; determined the association of undernutrition with household food security and diet diversity; child feeding practices, child illness and achievement of minimum diet diversity and meal frequency among children; and compared the child mortality risk between food secure and food insecure households and across selected maternal factors.

KEY FINDINGS

48% OF CHILD DEATHS IN PH LINKED TO UNDERNUTRITION

This rate is higher than global average of 45%



The investigation into the link of hunger and undernutrition to child mortality in the Philippines revealed the following significant results:

a) In 2015, 48% of total child deaths in the Philippines are attributable to underweight, an indicator of child undernutrition.² This rate is higher than in 2013 and that of the global average (45%).³ According to the WHO, about 45% of child deaths in the world are linked to nutrition-related factors.⁴ The Lancet 2013 Maternal and Child Nutrition Series, also states that undernutrition, including fetal growth restriction, suboptimum breastfeeding, stunting, wasting, and deficiencies of vitamin A and zinc, cause 45% of child deaths.⁵ Studies have shown that child undernutrition significantly increases the risk of deaths in children. The effect of childhood diseases, insufficient diet, household food insecurity,

maternal factor and socio-demographic factors all contribute to this. Malnutrition is identified as an underlying cause that is associated with childhood illnesses -- diarrhea, pneumonia, malaria and measles – that lead to child mortality.

Therefore, with **31,813³** of the **65,613¹** child deaths in the Philippines in 2015 being linked to underweight status, we can calculate that the rate of child deaths due to undernutrition in the Philippines is at 48%, higher than global average.

b) Household food insecurity or hunger is a strong predictor of underweight status in children. Children from urban areas¹ below 6 months of age living in moderately and severely food insecure households are 4 times more likely to be underweight than children from food secure households. This means that mothers or children may have skipped meals or experienced extreme hunger.

KEY FINDINGS

CHILDREN FROM SEVERELY FOOD INSECURE HOUSEHOLDS ARE NEARLY 3 TIMES AT HIGHER RISK OF DEATH



**Children 6-59 months, living in rural areas*

c) Insufficient number of meals per day is associated with stunting. Children 6 to 23 months living in rural areas and are not able to achieve the minimum meal frequency are twice as likely to be stunted.

According to the Minimum Meal Frequency Standards, the number of minimum meal frequency depends on age and breastfeeding status of the child. For breastfed infants 6-8 months old, 2 meals or more are needed while 3 or more meals are required for breastfed children 9-23 months old. For non-breastfed children 6-23 months old, 4 meals at the minimum are required.

d) Severe household food insecurity is significantly associated with child mortality among children 6-59 months living in rural areas², with children from these households being nearly 3 times at higher risk of death.

e) Maternal health factors were significantly linked to child mortality.

The Lancet Maternal and Nutrition Series 2013 emphasizes the importance of the nutritional status of mothers during conception and pregnancy as it ensures proper fetal growth and development. The study cited that intrauterine growth restriction (IUGR), also a form of

undernutrition, causes more than a quarter of all newborn deaths each year globally.

The following are the maternal factors that were significantly associated with child mortality (by category):

- **For deaths among children less than 6 months living in rural areas:** preterm birth, maternal age below 20 years and between 40-49 years, 2-3 pregnancies in the past, previous child deaths, and less than 2 years birth interval
- **For deaths among children less than 6 months living in urban areas:** preterm birth, maternal age below 20 years and 4 or more pregnancies in the past
- **For deaths among children 6-59 months living in rural and urban areas:** preterm birth

Mothers who delivered preterm babies are almost 5 times at risk of having child deaths than their counterparts. Some of the causes of preterm labor are maternal health conditions and nutrition status, infections, multiple and teenage pregnancies. Measures to address these problems should therefore be focused on women in the reproductive age. Quality pre-pregnancy programs (such as adolescent sexual and reproductive health) and antenatal care are among the key interventions in preventing newborn deaths due to complications of prematurity, including stillborn.

MATERNAL HEALTH IS SIGNIFICANTLY LINKED TO CHILD MORTALITY



RECOMMENDATIONS



At nine-months-old Janice was dangerously malnourished. But now, through Save the Children's support, the whole family is sharing nutritious meals.

The findings from this national study supports the need for more measures to address food insecurity particularly in severely food insecure households and to address maternal and child nutrition. Key targets and priority should be given to households with pregnant women and children less than five years old. Some of these measures include:

- Passage of the First 1000 Days Bill, also known as the Healthy Nanay, Healthy Bulilit Bill in the Philippine Congress, and ensure sufficient budgetary allocation so that mothers and children are provided with quality pre- and post-natal care, essential early newborn care, basic nutrition services, optimal infant and young child feeding especially exclusive breastfeeding and appropriate complementary feeding, micronutrient supplementations, and accessible maternal care (including family planning) from conception up to child's second birthday;
- Inclusion of the status of food insecurity as criteria in selecting conditional cash transfer (such as the Pantawid Pamilyang Pilipino Program or 4Ps) beneficiaries and other social protection measures such as food vouchers or safety nets to target households at highest risk of child undernutrition and mortality;
- Ensure targeted cash transfers and food aid government programs for households identified as severely food insecure, are delivered efficiently and include complementary feeding and dietary supplementation as part of the sessions for parents and child care givers especially during emergencies; and,
- Improve the provision of livelihood opportunities and social protection measures to address short- and long-term hunger particularly among families with infants and young children during emergency and non-emergency settings.

REFERENCES & NOTES

References:

¹United Nations Inter-agency Group for Child Mortality Estimation (UN IGME) 2017

²2015 Updating Survey of Nutritional Status of Filipino Children and Other Population Groups

³Cox proportional hazards regression analysis was done to estimate and compare the child mortality risk of households experiencing food insecurity and households that are food secure. Logistic regression analysis was utilized to estimate magnitude of association of undernutrition with household food security, diet diversity and child feeding practices. Child mortality attributable to undernutrition (underweight) was computed using a risk differential approach.

⁴Children: Reducing Mortality; World Health Organization Media Center Fact Sheet Updated October 2017

⁵Black RE, Victora CG, Walker SP, and the Maternal and Child Nutrition Study Group. Maternal and child undernutrition and overweight in low-income and middle-income countries. Lancet 2013; published online June 6. [http://dx.doi.org/10.1016/S0140-6736\(13\)60937-X](http://dx.doi.org/10.1016/S0140-6736(13)60937-X)

Notes:

⁶No significant relationship was found between household food insecurity and underweight status in children in rural areas. Other factors could interplay.

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Save the Children

Save the Children is the leading independent organization for children, working in over 120 countries around the world.

We believe that every child deserves a future. In the Philippines and around the world, we give children a healthy start in life, the opportunity to learn and protection from harm. We do whatever it takes for children - every day and in times of crisis - transforming their lives and the future we share.

In 2015, we launched the Lahat Dapat campaign - our biggest campaign yet against child hunger and malnutrition in the Philippines. This campaign aims to raise the public's awareness regarding the alarming status of child hunger and malnutrition in the Philippines, and get more people involved in pushing for sustainable solutions that will help end the vicious cycle of hunger and malnutrition in the country.

Visit our website to know more about our
Lahat Dapat campaign:

www.savethechildren.org.ph/lahtadapat