Chronic Malnutrition in Guatemala

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The information presented relates to both authors’ experiences volunteering in public and private/non-profit clinics in and around Quetzaltenango, Guatemala for several months during the summer of 2013.

WHAT IS CHRONIC MALNUTRITION AND WHAT CAUSES IT?
Chronic malnutrition refers to the life-long effects from lack of needed nutrients from conception to roughly 2 years of age where children are in their most plastic state (the “Window of 1,000 days”).
* At 54%, Guatemala has the highest prevalence of stunting under the age of five in the Americas and the fifth highest in the world.
* Nearly three million Guatemalan lack access to safe drinking water and about six million lack access to sanitation.
* A lack of general knowledge about malnutrition is common in Guatemala. For example, breast milk is inadequately utilized during the first six months of life.
* The lack of distribution of Guatemalan physicians in rural areas stems the flow of quality healthcare to indigenous communities while de-emphasizing the importance of primary care.
* Chronic malnutrition also correlates with this disparity as 80% of indigenous children under five years old are malnourished compared to the national average of 43.4%.

WHY ADDRESS MALNUTRITION?
1977 INCAP Supplementary Feeding Trial: Twice daily, inhabitants of two Guatemalan villages received a gruel-like substance called “Atole”, which was high in protein and calories. Conversely, the inhabitants of two other comparable villages received “Fresco” twice daily - a low protein, low sugar-salted dried milk.1
* Individuals exposed to Atole before age 3:
  - Grew physically bigger and performed better on cognitive tasks.
  - Showed higher intellectual functioning as adults.
  - Earned higher hourly wages as adults.
  - Babies born to women who were exposed to Atole in the first 7 years of life had larger numbers for birth weight, height, head circumference, height-for-age, and weight-for-age.

ADDRESSING THE PROBLEM

Public Sector
In February of 2012, the current president, Otto Perez Molina, signed “El Plan del Pacto Hambre Cero”, or the Zero Hunger Pact.
* Aims to reduce childhood chronic malnutrition by 10% within four years, and 24% within ten years. The plan also aims to reduce deaths due to acute malnutrition, address acute seasonal malnutrition, provide health care to children and pregnant/nursing women, and fight rural poverty.
* The plan focuses intently on addressing malnutrition within “la ventana de los mil días”, or the first 1000 days of life (including time in utero).

Private Sector
Nutricion Para los Ninos (NPLN) utilizes funds from both Timmy and Pop-Wuj to promote nutrition within the “Window of 1,000 days” in Quetzaltenango and local indigenous communities.
* Targets children displaying key clinical signs of malnutrition with selection based upon socioeconomic factors.
* Key signs of malnutrition are based on World Health Organization designated percentiles of height and weight for this age group.
* Children are given supplements tailored to the severity of their malnutrition.
* NPLN functions through monthly sessions where families are educated about nutrition and children are evaluated and given the appropriate nutritional supplements.

“There is... clear evidence that the major damage caused by malnutrition takes place in the womb and during the first two years of life; that this damage is irreversible; that it causes lower intelligence and reduced physical capacity, which in turn reduce productivity, slow economic growth, and perpetuate poverty, and that malnutrition passes from generation to generation because stunted mothers are more likely to have underweight children. This report sends the message that, to break this cycle, the focus must be on preventing and treating malnutrition among pregnant women and children aged zero to two years.”
- The World Bank

REFERENCES