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Gaps and Priorities in U.S. Contributions to Global Disease Challenges: What has the U.S. done well and not as well?

Maternal and Child Undernutrition

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7 July, 2008 IOM WG Meeting



Challenges

- 32% of children <5y stunted (178 million); 3.5% severely wasted (19 million)
- 10-19% with maternal low BMI
- High prevalence of deficiencies of micronutrients, e.g. vit A, zinc and iron
- Maternal and child undernutrition cause of 3.5 million child deaths, 100 thousand maternal deaths (iron), 35% of disease burden in <5y and 11% of global disease burden



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Cost-Effective Interventions

- ⌘ Breastfeeding promotion and support
- ⌘ Comp. feeding promotion
- ⌘ Vitamin A, iron, iodine and zinc fortification
- ⌘ Vitamin A supplementation
- ⌘ Diarrhea treatment with ORS and zinc
- ⌘ Not as cost-effective but justified
 - ⌘ CB therapeutic feeding of severe wasting
 - ⌘ Iron (MN?) suppl. in pregnancy



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U.S. Contribution

- p** What has the U.S. done well in the last few decades?
 - n** Applied research e.g. on vit A and zinc with subsequent program support
 - n** Food aid in emergency settings
- p** What has the U.S. done poorly in the last few decades?
 - n** Support for basic nutritional interventions (<2% of U.S. nutrition assistance)
 - n** Food aid in non emergency settings (monetized food aid)
- p** What are some missed opportunities for the U.S.?
 - n** Infant and young child feeding promotion
 - n** Capacity building in nutrition



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Gaps in Knowledge

- ⌘ What are the key gaps in knowledge?
 - § **Operational research**-effectiveness and cost-effectiveness of nutrition interventions, delivery research
 - § **Basic research**-measurement methods to assess micronutrient deficiencies in populations, fetal and newborn growth standards, prev. of LBW, effects of micronutrients, effects of early nutritional deficiencies on human capital and non communicable diseases
 - § **Delivery platforms**-integration of nutrition with other maternal and child interventions



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Recommendations for U.S. Action

- ⌘ **Service provision**-Infant and young child feeding promotion, fortification and supplementation with micronutrients
- ⌘ **Operations research**-Delivery of integrated maternal/child health and nutrition programs, and links with HIV/AIDS programs
- ⌘ **Basic research**-Effects of micronutrients on multiple outcomes, improved formulations of micronutrient supplements

Strengthening Health Systems

- ⌘ Delivery of many effective maternal and child nutrition interventions needs a functioning health system, but with an emphasis on basic services in communities
- ⌘ Some nutrition interventions can be done outside of the health system e.g. micronutrient fortification and there may be other opportunities for commercial food products.
- ⌘ Many maternal and child interventions directed at infections will improve nutrition