The Costs of Undernutrition

- Over one-third of child deaths are due to undernutrition, mostly from increased severity of disease.1
- Children who are undernourished between conception and age two are at high risk for impaired cognitive development, which adversely affects the country’s productivity and growth.
- Childhood anemia alone is associated with a 2.5% drop in adult wages.8

Where Does Burundi Stand?

- 53% of children under the age of five are stunted, 35% are underweight, and 7% are wasted.5
- 11% of infants are born with a low birth weight.2

As shown in Figure 1, the prevalence of stunting is substantially higher in Burundi compared to other countries in the Africa region with similar per capita incomes. It is possible to achieve better nutrition outcomes despite low income.

**FIGURE 1** Burundi has Higher Rates of Stunting than its Income Peers

<table>
<thead>
<tr>
<th>Country</th>
<th>Prevalence of Stunting Among Children Under 5 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>60</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>40</td>
</tr>
<tr>
<td>Malawi</td>
<td>30</td>
</tr>
<tr>
<td>DR Congo</td>
<td>20</td>
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<tr>
<td>Somalia</td>
<td>20</td>
</tr>
<tr>
<td>Guinea Bissau</td>
<td>20</td>
</tr>
<tr>
<td>Niger</td>
<td>10</td>
</tr>
<tr>
<td>Eritrea</td>
<td>10</td>
</tr>
<tr>
<td>Liberia</td>
<td>10</td>
</tr>
<tr>
<td>Global average</td>
<td>30</td>
</tr>
</tbody>
</table>

GNI per capita (US$2008):
- 0
- 100
- 300
- 500

Source: Stunting rates were obtained from the WHO Global Database on Child Growth and Malnutrition (figures based on WHO child growth standards). GNI data were obtained from the World Bank’s World Development Indicators.

Vitamin and Mineral Deficiencies Cause Hidden Hunger

Although they may not be visible to the naked eye, micronutrient deficiencies impact well-being, and are widespread in Burundi, as shown in Figure 2.

*Most of the irreversible damage due to malnutrition happens during gestation and in the first 24 months of life.*6

**FIGURE 2** High Rates of Vitamin A and Iron Deficiency Contribute to Lost Lives and Diminished Productivity

<table>
<thead>
<tr>
<th>Prevalence (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preschool Children</td>
</tr>
<tr>
<td>Pregnant Women</td>
</tr>
</tbody>
</table>


- Adequate intake of micronutrients, particularly iron, vitamin A, iodine and zinc, from conception to age 24 months is critical for child growth and mental development.
- Vitamin A: One-quarter of preschool aged children, and 12% of pregnant women are deficient in vitamin A.8 Supplementation of young children and dietary diversification can eliminate this deficiency.
Poor Infant Feeding Practices

- Fewer than one-half (45%) of all infants under six months are exclusively breastfed.2
- During the important transition period to a mix of breast milk and solid foods between six and nine months of age, almost 1 in 8 infants are not fed appropriately with both breast milk and other foods.2

Solution: Support women and their families to practice optimal breastfeeding and ensure timely and adequate complementary feeding. Breast milk fulfills all nutritional needs of infants up to six months of age, boosts their immunity, and reduces exposure to infections. In high HIV settings, follow WHO 2009 HIV and infant feeding revised principles and recommendations.14

High Disease Burden

- Undernutrition increases the likelihood that a child will become sick and also increases the severity of disease.
- Undernourished children who fall sick are much more likely to die from illness than well-nourished children.
- Parasitic infestation diverts nutrients from the body and can cause blood loss and anemia.

Solution: Prevent and treat childhood infection and other disease. Hand-washing, deworming, zinc supplements during and after diarrhea, and continued feeding during illness are important.

Limited Access to Nutritious Food

- An alarming 63% of households are food insecure, meaning they do not have enough calories.10 Many more households likely lack access to diverse diets year round.
- Achieving food security means ensuring quality and continuity of food access, in addition to quantity, for all household members.
- Dietary diversity is essential for food security. High levels of hidden hunger indicate that dietary diversity may be poor.

Solution: Involve multiple sectors including agriculture, education, transport, gender, the food industry, health and other sectors, to ensure that diverse, nutritious diets are available and accessible to all household members.

References


World Bank Nutrition Related Activities in Burundi

Projects: The World Bank is currently supporting a US$25 million Health Sector and Development Support Project. One of the aims of this operation is to increase utilization of health services for women and children under the age of 5.

Analytic Work: The World Bank recently produced a Health Sector Review Report addressing issues pertaining to child and maternal health.

Addressing undernutrition is cost effective: Costs of core micronutrient interventions are as low as US$0.05–3.60 per person annually. Returns on investment are as high as 8–30 times the costs.13