The economic rationale for investing in stunting reduction

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Abstract

About 175 million preschool children are stunted, primarily in South Asia and Sub-Saharan Africa. Early-life stunting is linked to a number of adverse outcomes over the life cycle. This study estimates economic benefit/cost ratios for a number of heavily-burdened countries, arguing under conservative assumptions. These benefit/cost estimates range from 3.8 (DRC) to 34.1 (India), with a median of 18 (Bangladesh). These results suggest that rates of return to investments in reducing stunting are comparable to or better than many other uses of public resources, particularly because there are distributional gains in terms of reducing poverty in the next generation as well as non-economic gains such as reducing child suffering.

Introduction

- About 175 million preschool children are stunted.
- Stunting usually develops <2-3 y of age.
- Marker of systemic dysfunction during sensitive phase of child development.
- Linked to many adverse outcomes related to later developments over life.
- To assess economic benefits relative to costs (B/C ratio) need value impacts and costs over life cycle.

Discussion

- Overall goal: to generate credible estimates of benefit/cost ratios for a plausible set of nutritional interventions.
- Considerable challenges in measuring benefits and costs; assumptions probably conservative (e.g., half of INCAP effect, only income/consumption and not other effects, only effects for young adults 21-35 y of age – not when younger or older.)
- Estimated average benefit/cost estimates between 3.8 (DRC) and 34.1 (India), with median of 18 (Bangladesh).
- All estimated benefit/cost ratios > 1 even if overestimate by factor of 2 or 3.
- Compare favorably with other investments that public funds will compete for.
- Focus on private benefits, not social benefits that might differ from private benefits and create efficiency rationale for policy.
- Raises question why not more private investment to reduce stunting? Information problems? Imperfect capital markets?
- Since those stunted tend to be poorer, distributional (anti-poverty) motive for use of public resources to reduce stunting.

Conclusions

- In countries in which stunting widespread, primarily in South Asia and Sub-Saharan Africa, our estimates of benefit/cost ratios are substantially above one in terms of economic benefits alone.
- This suggests that investments in reducing stunting have rates of return comparable to or better than many other uses of public resources, particularly because there are distributional gains in terms of reducing poverty in the next generation as well as non-economic gains such as reducing child suffering.

Results

Benefits/costs in selected high-burden countries substantially exceed one (Figure 2).

References