Health or Wealth: Which Comes First?

Investing in people, especially in their health, is not something that typically requires justification. What has received considerable attention, however, is the question of whether investing in wealth generation leads to good health and nutrition outcomes, or whether investing in people’s health is a critical element in creating societal wealth. This is a timely and relevant question for Africa. Many African countries are growing economically, in large part due to expansion in extractive industries and high global prices for raw materials, yet investment in health and nutrition has lagged behind. This has resulted in stubbornly high levels of maternal mortality and malnutrition across the continent, and high fertility in many countries.

This note summarizes the key headlines on this issue. The emerging picture is of a possible virtuous cycle of health feeding into wealth, which then feeds into health, but the evidence appears to be much stronger, especially in Africa, on the ‘Health-producing-Wealth’ side of the equation. The evidence is presented in three sections. The first section takes advantage of Africa’s heterogeneous wealth generation to better understand the impact of wealth on health. The second section looks at East Asia, a region that has done well on both health and wealth and draws lessons for which came first. The last section summarizes the relevant econometric evidence from the work of the Growth Commission and the findings of the Copenhagen Consensus to identify which health and nutrition investments have an impact on productivity and economic development.

KEY MESSAGES

1. African countries that are experiencing strong economic growth from mineral revenues have not translated this wealth into improved health and nutrition for all.

2. Data from the East Asian tigers that have achieved both health and wealth show that health and nutrition improvements actually came before economic take-off.

3. There is strong microeconomic evidence in Africa and elsewhere that investing in the health and nutrition of young children has proven payoffs in terms of productivity and family wealth as well as human capital in these countries.

WASTED WEALTH IN AFRICA?

A recent analysis of the Middle Income Country profiles in Africa showed surprising findings: Better-off countries, especially those driven by mineral wealth, appear not to be doing well on human development measures, especially health. If the Wealth-producing-Health side of the virtuous cycle is strong, we would expect to see a clear relationship in African countries between per capita income and measures of health and nutrition outcomes. Figures 1, 2 and 3 show that: (i) while the relationship between health and wealth is stable for countries outside Sub-Saharan Africa (SSA), it is not so for SSA countries; (ii) SSA countries as a group are performing badly on health relative to wealth when compared to other countries; (iii) Higher-income SSA countries are performing worse than countries in the rest of the world with similar incomes; and (iv) Oil-rich SSA countries are doing badly on health, nutrition, and educational attainment. The takeaway message here is that wealth has not produced health in most better-off SSA countries.
WHAT CAME FIRST IN EAST ASIA?

East Asia has been the model region for success in improving both health and nutrition as well as increasing per capita income. Trends in some East Asian countries help clarify which sides of the virtuous cycle have stronger evidence.

The four charts opposite (for China, Malaysia, South Korea, and Thailand) unambiguously show that improvements in health (infant mortality in the red squares) came before the strong uptake in the economy (GNP per capita in the yellow line). South Korea and China show the most dramatic drops in mortality (or improvements in life expectancy), long before the economic uptake, but all four countries clearly show the importance of addressing health first.

A detailed analysis of the China data (Wagstaff et al. 2009) confirms these basic findings showing that reductions in child mortality were strongest in China between 1960 and 1980 (before the economic liberalization and rapid economic growth). Similarly, China showed the greatest improvements in stunting rates long before the economic boom.
WHAT ABOUT MICRO EVIDENCE?

The Growth Commission recently brought together strong evidence on the drivers of economic growth. Of course, there were no simple answers and the data did not point to a single global solution for improving economic growth. However, there was strong empirical evidence in Africa linking investments in health and nutrition to improved productivity and economic development.

Some interventions are particularly relevant to Africa because they target the obstacles that poor people face when trying to increase their earning potential. Most malnutrition in Africa, Asia or Latin America happens in the first 1,000 days of a child’s life, from conception to age two, with serious long-term consequences. Investments to improve nutritional outcomes, such as distributing vitamin and mineral supplements and promoting exclusive breastfeeding, are therefore most cost-effective during these early years. These investments have very high economic rates of return, and can lock in human capital for future economic growth.

In Guatemala, boys exposed to an early childhood nutrition program before age three earned 46 percent more thirty years later. Similarly, in slum and rural areas of Africa with limited sanitation, worm infection is a common constraint on poor children’s development. In Kenya, deworming schoolchildren was the most cost-effective way of reducing absenteeism, gaining the equivalent of an additional year of schooling for only US $3.50 per child.

Figure 5: Nutrition interventions in the earliest years (first 1,000 days) produce the greatest returns to investment
Wage earners, who had benefitted from deworming when in school, worked on average 5.2 more hours per week and were more likely to have better-paid jobs. Men were three times more likely to be employed in manufacturing, and women more likely to be in wage labor than casual labor. Average adult earnings rose more than 20 percent, almost identical to the increase seen when poor populations were dewormed in the southern USA. When increased hours of labor are viewed as a gain in endowment, the estimated social financial rate of return is about 65 percent a year.

For many countries in Africa, increasing agricultural productivity is essential to reduce poverty, since the agricultural sector typically has the highest poverty rate (often around two-thirds) of any occupational group. But areas with high potential for agricultural growth thanks to good rainfall, proximity to water sources, or with agricultural investments (irrigation) are also likely to be risk areas for mosquito-borne diseases. Disease prevention and treatment efforts are therefore important. Estimates from Chad, Congo and Rwanda suggest that with each malaria episode, a worker loses between US$8 and US$18 in productivity, rising to US$31 in Ethiopia when medical costs are included. In Nigeria, where 51 percent of people report a malaria episode, malaria testing and treatment increases the labor supply and productivity of sugar cane workers, and accounts for a 26 percentage point increase in earnings. Similarly, successful control of riverblindness in Africa has freed more than 25 million hectares of arable land from the risk of disease, enough to feed some 17 million people.

The micro-economic evidence on returns to investments in health and nutrition has prompted the Copenhagen Consensus to summarize the global best-buys and to rank these investments as highly cost effective. A May 2012 press release by the group stated that:

“The single most important investment, according to the panel, would step up the fight against malnutrition…Likewise, just $300 million would prevent 300,000 child deaths if it were used to strengthen the Global Fund’s Affordable Medicines Facility-malaria financing mechanism, which makes combination therapies cheaper for poor countries. Put in economic terms, the benefits are 35 times higher than the costs – even without taking into account that it safeguards our most effective malaria drug from future drug resistance.”

QUESTIONS TO AFRICAN MINISTERS

There is strong evidence that investments in health and nutrition are not only good for people’s health but also for economic development. Given that economic growth alone, especially when driven by extractive industries, does not appear to have a positive impact on population health:

1. What would it take to increase investments in cost effective and productivity-enhancing interventions in nutrition, maternal and child health, and disease management?

2. How do we ensure that any increases in allocations to health produce the expected results?

REFERENCES

