The Role of Economics in Global Health Research: Examples from the Fogarty International Center

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Why Invest in Economics Research in the Global Health Context?

• Better understand relationships between health, productivity, and development

• Priority-setting and resource allocation

• Implementation science

• Informs efforts to strengthen health systems
  ▪ Efficient task-shifting strategies
  ▪ Integration of services
  ▪ Impact of external factors/economic shock
Why Invest in Health Economics in the Global Health Context?

- Understand socio-economic determinants of disease and health - development of appropriate interventions
- Enhanced role of cost-effectiveness in selection of interventions and delivery strategies
- Lessons learned/development of interventions that might be applicable to US populations
Example: Effect of nutrition intervention during early childhood on later economic productivity in Guatemala

• Substantial, but indirect, evidence that improved nutrition in early childhood in LMICs is a long-term economic investment

• Study estimated the effect of exposure to nutritional supplements in early childhood on incomes more than 25 years later

• Finding: exposure to high-protein supplement before age 3 associated with significantly higher hourly wages for men (46% over average wages in sample)

Example: Cash Component of Conditional Cash Transfer Program Associated with Higher BMI and Blood Pressure in Mexican Adults

- Middle-income countries face simultaneous burden of undernutrition and obesity
- First study to unbundle a CCT program to investigate the impact of its individual components on critical areas of adult health

Developed an evidence base to inform decision-making by:

- Providing estimates of the cost-effectiveness and impact of single interventions and packages
- Defining global disease burdens
- Summarizing implementation experience in different regions
Top Ten Best Buys in Health

- Insecticide-treated bednets, household insecticide spraying, preventative treatment for pregnant women
- Enforce traffic regulations, install speed bumps at dangerous intersections
- DOTS for TB
- Keep newborns warm and clean/ breastfeeding
- Promote use of aspirin and other inexpensive drugs to prevent and treat heart attack and stroke
Top Ten Best Buys in Health

• Vaccines – DPT, Polio, BCG, Measles

• Monitor children’s health to prevent/treat childhood pneumonia, diarrhea and malaria

• Tax tobacco products

• Prevention strategies for HIV

• Vitamin A, iron, and iodine for children/pregnant women
Impact of Economics Research on Health Policy and Research Investment

• Tobacco control through taxation
  ▪ South Africa
  ▪ China

• Increased research on “polypill” for prevention of cardiovascular disease and stroke
• Need valid and comparable information on costs and consequences of policy alternatives for *population* health

• Need data on efficiencies and effectiveness of bundling interventions and their integration into service delivery platforms

• 3-4 country studies, including India & South Africa
Why South Africa Country Study?

- Growing burden of chronic diseases in addition to HIV/AIDS and TB – systems approach needed
- Already existing data on costs
- Need to ensure that resource allocation decisions are based on combination of the burden of disease, effectiveness of interventions and cost effectiveness
Future Initiative: Trans-NIH Center for Global Health Studies

- Platform for short-term, project-based scholarship in global health science and policy
- Multidisciplinary teams with diverse expertise and experience
- Will harness the scientific input and participation of LMIC researchers and policymakers at all stages
CGHS cont’d: Areas of Focus

• Methods to promote the research to policy interphase

• Decision-making tools to guide public health strategies and investments
CGHS cont’d: Types of Projects

- Examine the integration of services in diverse settings. Is it more effective and/or more cost-effective than vertical programming? Under what conditions?

- Identify the most appropriate and effective strategies for zinc supplementation in the context of ongoing nutrition and health care delivery at the country level.