

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

Nalini Anand JD, MPH

Advisor, Public-Private Partnerships and Legislative Affairs

Division of International Science Policy, Planning and Evaluation



February 23, 2010



FOGARTY
INTERNATIONAL CENTER

Why Invest in Economics Research in the Global Health Context?

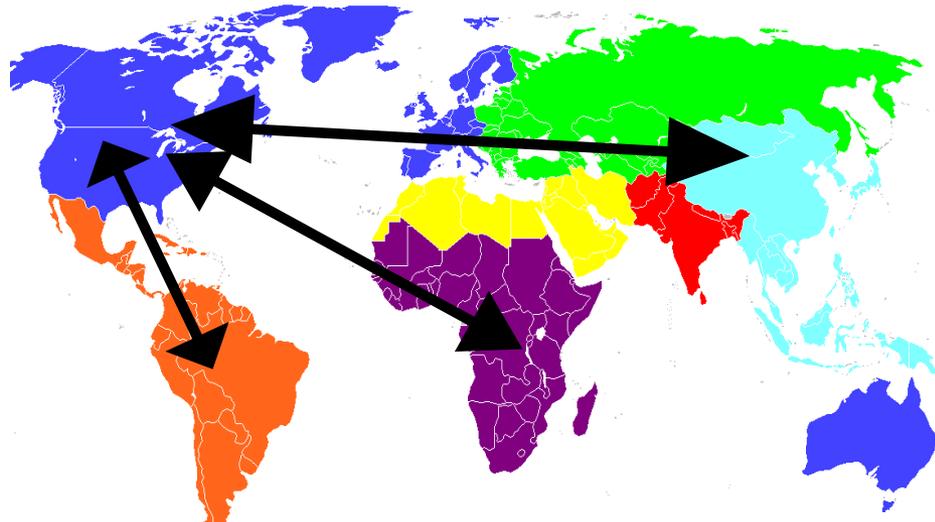


- Better understand relationships between health, productivity, and development
- Priority-setting and resource allocation
- Implementation science
- Informs efforts to strengthen health systems
 - Efficient task-shifting strategies
 - Integration of services
 - Impact of external factors/economic shock

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)

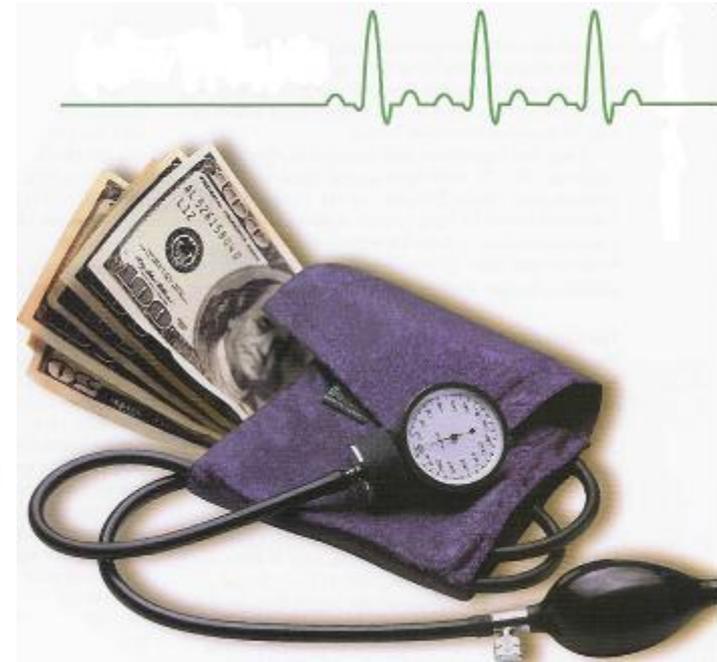


Hoddinott J et al. Effect of a nutrition intervention during early childhood on economic productivity in Guatemalan adults. Lancet. 2008 Feb 2;371(9610):411-6.

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



Fernald LC et al. Cash component of conditional cash transfer program is associated with higher body mass index and blood pressure in adults. J Nutr. 2008 Nov;138(11):2250-7.

Disease Control Priorities Project (DCPP) Objectives



- 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



Disease Control Priorities in Developing Countries

SECOND EDITION

Editors

Dean T. Jamison
Joel G. Breman
Anthony R. Maasham
George Alleyne
Mason Croston
David S. Evans
Prashant Jha
Anna Mills
Philip Musgrove

Disease Control Priorities Project

Global Burden of Disease and Risk Factors

Editors

Alan D. Lopez, Colin D. Mathers, Majid Ezzati,
Dean T. Jamison, and Christopher J. L. Murray



Disease Control Priorities Project



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





FOGARTY

The Next Step: Disease Control Priorities Network UW, Seattle

- 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





FOGARTY

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



FOGARTY

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