Government Health Expenditure and Population Health in the Developing World

Can We Buy Health?

Zara Petkovic

literature on government health expenditure and population health in developing countries as a group is relatively sparse and new
Some have found a strong, positive relationship between the two
Some have found only a slight correlation or an interaction relationship
Relationship often depends on external factors
A few have found no overarching relationship whatsoever
May be due to gap between potential and realized ability of government expenditure to effect change
May affect only certain populations within a country

Health problems in developing countries often have effective and relatively inexpensive solutions
Examples: malaria, diarrheal disease
Related to the importance of primary care
However, there are often other barriers to implementation
As primary care systems become better established in the developing world, further improvements in population health become more expensive and often less cost-effective
Diminishing rate of returns
This will likely become increasingly evident in coming years

Life Expectancy by Government Health Expenditure

Infant Mortality Rate by Government Health Expenditure

Maternal Mortality Rate by Government Health Expenditure

Under-5 Mortality Rate by Government Health Expenditure

Hypothesis: Government expenditure on health measured as a percentage of GDP increases population health in those countries
Included developing countries for which data exist at any point from 1960 to 2012
Used World Bank's definition of a developing country
Used regression analysis to test relationship between government health expenditure as a percentage of GDP and four measures of health: infant mortality rate, under-5 mortality rate, maternal mortality rate, and life expectancy
Graphs to the left show regression fit lines
Controlled for per capita GDP, poverty, primary education attainment

References:

5. Can We Buy Health?
12. Hypothesis & Method
13. Life Expectancy
14. More, data, and conclusions.
15. Moreno-Serra & Smith. (2012). Does investment in health policy have a fairly similar effect on measures of primary and secondary care in the developing world?
16. Would like to follow up with more data on health adjusted life expectancy (HALE) and corruption