Development Policy

Lecture Note 14

Health

Aside from GDP growth, the under-five mortality rate (expressed as per 1,000 live births) is the single best indicator of development progress. In the poorest countries of the world, more deaths occur under the age of five than in all other age groups *combined*. Very few young children die in rich countries. The child mortality rate is also the most important factor in calculating life expectancy. When many children die, average life expectancy is very short, even if people who survive into adulthood live into their 60s or 70s.

The good news is that the developing world has achieved remarkable progress in reducing child mortality. Progress has accelerated in Sub-Saharan Africa since the 1990s. Southeast Asia has performed exceptionally well, including Indonesia, which had very high levels of child mortality in 1960. Some of this progress is simply due to rising incomes. As we can see, income per capita is closely and negatively associated with child mortality. Or to put it another way, poor children die in disproportionate numbers. They are unable to afford medical care, adequate nutrition and a healthy environment.

The problems begin at the moment of birth. Many children die at birth because complications arise and there is no skilled health worker present to take the necessary steps to save the life of the child and the mother. Birth asphyxia, when a baby's brain or other organs does not get enough oxygen during delivery, accounts for ten percent of child deaths around the world. A skilled midwife can help avoid many of these cases, for example when they are due to problems during delivery, infections or anemia. Africa and South Asia are lagging behind the other developing countries in access to skilled medical personnel during childbirth. Within Southeast Asia, Malaysia and Thailand have achieved nearly universal coverage.

Nutrition is also a major factor, as poor nutrition increases vulnerability to infections and other diseases. The accepted definition of an underweight child is a child that is less than two standard deviations below the WHO established median weight for age. Remarkably, sixty percent of children were underweight in South Asia as recently as 1980. That figure has come down to about one-third now, and about twenty percent in Sub-Saharan Africa (the same level as in Vietnam and the Philippines). So there has been rapid progress in improving child nutrition, but hundreds of millions of children are still not sufficiently well fed to grow up normally and resist disease.

Diarrhea is the second most common cause of child mortality, after pneumonia. Drinking unsafe water, often because of the absence of improved water sources and improved sanitation, is the main cause. Vietnam's success in reducing child mortality is largely due to the country's strong record of increasing access to clean water. Diarrhea kills because it causes dehydration. The tragedy of the large number of child deaths could be prevented with oral rehydration solution (ORS), an expensive mixture of salt and sugar. Water can also be purified cheaply with chlorine bleach.

Infectious diseases are another major cause of child death. Immunization coverage can sharply reduce mortality due to diseases like diphtheria, tetanus and pertussis (whooping cough) and measles. This is an area in which Southeast Asian countries, and the world as a whole, have made tremendous progress. Delivering immunization is extremely cost effective as preventing disease is easier and cheaper than treating them in hospital. This is largely a question of the supply of immunization and health care services, especially in rural and remote regions. There are demand side factors as well: parents must be educated about the importance of immunization through mass media campaigns and even door to door information from local officials. This requires a large commitment of money and energy from central and local government.

Government spending on health care is strongly associated with lower levels of child mortality. This is not surprising, since maternal and infant care cost money. In many rural areas, there is no market for health care and the only facilities are financed and operated by the government. Many of these clinics are rudimentary and staffed by undertrained health workers, but their presence prevents child deaths from easily managed problems like diarrhea and infectious diseases. Resources do matter.

With very few exceptions, government spending on public health in developing countries has increased since the 1990s. Work by Chunling Lu et al. has shown that the increase has been driven largely by two factors: increasing share of health in government expenditure; and rising GDP per capita. The increase in public health spending has been particularly rapid in Sub-Saharan Africa, which has been seen by proponents of overseas development assistance as evidence of the importance of aid in boosting health spending.

But has aid really increased spending on public health in developing countries? Chunling Lu and colleagues attempt to answer this question. They find that while total spending on public health may increase as aid increases, aid does not encourage governments to spend more of their own money on health. In fact, aid to governments for health related expenditure is significantly associated with a *sharp drop* in government spending from its own sources on health. The lesson is clear: aid is

substitute, not a complement, to government spending on public health.[1] This does not mean that that health-related development assistance is harmful. It simply means that it relieves pressure on governments to use their own resources for public health, and does not necessarily improve the provision of health services.

Households and individuals also spend their own money on healthcare. They buy health insurance, either from the government or private companies, or they pay "out of pocket." Vietnam spends a relatively large share of national income on health care, and within this amount relies unusually heavily on private spending. Out of pocket spending is a problem because it reduces demand for health services. Many poor people cannot afford to see a doctor and so they postpone treatment. This could result in public health problems, if for example people with infectious diseases do not get treatment because they cannot afford to. Within the region, Thailand has sharply reduced reliance on public spending with the implementation of its Universal Coverage Scheme launched in 2001. Initially outpatient services were provided at public facilities for 30 baht (USD 0.70), but this payment was eliminated in 2006. UCS covers 75 percent of the Thai population. Civil servants and the military are covered by a separate scheme.

Achieving universal health insurance coverage is an important goal in many countries. Health insurance enables people to get access to treatment at reasonable cost, and reduces the risk that a serious illness or accident will impose healthcare costs that they either cannot afford or that results in large debts. The basic principle underlying health insurance is that illness and accidents are distributed randomly across the population. We cannot plan for health expenditures in the future because we do not know who will get sick and when they will get sick. Therefore, if we all contribute to health spending each year, in some years we will receive more than we pay and in other years we will receive less than we pay in the form of premiums. Some people go through life with few health problems and are net contributors. Others have multiple health problems and are net recipients. But no one has to pay more than they can afford.

Health insurance systems differ in terms of who pays, who is covered and who provides services. We can think of these three characteristics as revenue, risk pooling and service provision. There are two "ideal type" health insurance systems. The UK's National Health Service, designed after World War II, raises revenue from general taxation and payroll taxes, includes the entire population in one large risk pool, and provides services at public hospitals and clinics. Germany's Social Health Insurance, first implemented in the 19th century under Bismark, raises revenues through household

[1] Chunling Lu, Matthew T Schneider, Psaul Gubbins, Katherine Leach-Kemon, Dean Jamison, Christopher J L Murray (2010) Public Financing of Health in Developing Countries: A Cross-National Systematic Analysis, *Lancet*, 375:1375-87.

payments and payroll taxes, consists of numerous risk pools and largely obtains services from private providers. Between these two extremes, there are many varieties of health insurance that combine these various characteristics.

Developing countries face some difficult challenges in attempted to achieve universal coverage. With regard to revenues, they cannot rely on payroll taxes for revenues because most people do not work in the formal sector. Collecting premiums directly from households is costly and may discourage the poor from taking part. Vietnam relies heavily on co-payments at the point of service. This increases the amount of out-of-pocket spending for health care, even among insured households.

Risk pooling is important because it spreads risk across households with different probabilities of falling ill. Creating separate health insurance programs for different groups in the population narrows the pooling of risk. Countries often begin with separate health insurance schemes and merge them over time. Often civil servants and workers in formal sector occupations are insured first, and separate programs are set up for the poor and informal sector workers. Indonesia followed this path, but decided in 2011 to merge five separate programs into one risk pool under the Social Security Organizational Agency (*Badan Penyelenggara Jaminan Sosial*). Vietnam has one risk pool, with separate programs for formal and informal sector workers all contributing to Vietnam Social Insurance. Public funding is used in Vietnam to subsidize the participation of the poor. However, only about 42% of the public is currently enrolled in Vietnam.

Health services can be provided through public of private facilities, or some combination of the two. Provision through public hospitals and clinics requires supply side allocation of public resources. Provision through private facilities is made on demand, for example after a patient has been the doctor for treatment. Demand side system generally have high administrative costs but the providers have an incentive to be more responsive to patients. Vietnam finances public facilities to provide care to the public but VSS also pays the same hospitals for some forms of care on demand. Vietnam is also experimenting with capitation payments, a system under which patients register with a local facility, and the insurer provides the clinic with a fixed amount per patient per year. The intent is to force the provider to be more efficient (rather than continually asking the insurer for payment for services) and to encourage patients to stay at their local clinic rather than go directly to the central hospital.

Programs also differ in terms of how much is covered under insurance and how much still comes from out of pocket payments. Even insured households in Vietnam must cover about 60 percent of total health expenditures out of pocket. This is an unusually high figure, and is a result of the exclusion of most medicines from insurance coverage. Providers have an incentive to over-prescribe medication and to prescribe expensive drugs because they make money selling drugs to patients.

Making universal health insurance systems work depends on accountability and transparency. The World Bank estimates, based on user surveys, that 85 percent of Vietnamese patients view the central hospitals as suffering from corruption and 65 percent see local clinics as corrupt. Over-prescription of expensive medicines is a common problem. With regards to treatment, insurance fraud, side-payments to providers and overtreatment increase the cost of health care to patients and drain the system of scarce resources. Insurance fraud involves submitting claims to the insurer for treatment that has not taken place. Overtreatment arises when doctors prescribe unnecessary treatments—often expensive diagnostic tests—because of the profit motive rather than because of legitimate clinical reasons. This problem is difficult to monitor and assess, and reducing it would require a change in the incentive system in which providers are not paid for each service, and not paid more for more expensive services. For example, if hospitals had to pay for diagnostic tests, and doctors were not allowed to receive a portion of that payment, then they would be less likely to prescribe expensive tests. Patients provide side payments to doctors and nurses to ensure that family members are adequately looked after and that they do not have to wait in lengthy queues.[2]

An important obstacle to change in Vietnamese health care is the government's insistence that it be both player and referee. In other words, the government is the main health provider and also the only form of supervision and regulation of the health system. Achieving higher levels of accountability and transparency depends on the willingness of government to allow independent forms of monitoring of health services and the creation of an independent regulator. Strengthening professional associations of doctors and nurses would help establish and enforce professional standards. A larger role for non-profit organizations, in both service provision and advocacy for patients, would be a step in the right direction.

[2] Taryn Vian, Derick W. Brinkerhoff, Frank G. Feeley, Matthieu Salomon and Nguyen Thi Kieu Vien (2012) "Confronting Corruption in the Health Sector in Vietnam: Patterns and Prospects," *Public Administration and Development*, 32:49-63.