Nepal

Surprising to many, Nepal is one of the most impoverished nations on Earth and one of the least developed in all of Asia. The United Nations’ Human Development Index (HDI) which measures development by combining indicators of life expectancy, educational attainment, and income into a composite human development index, ranks Nepal 157 out of all 186 countries (just below Papua New Guinea which resides at 156). The HDI which is used in public health, is a single statistic which serves as a frame of reference for both social and economic development of nations.

Rural Healthcare in Nepal

Based on current available data through Nepal Medical College, approximately two-thirds of the health problems in Nepal are infectious diseases. Diseases and illnesses which include diarrheal illnesses, respiratory and urinary tract infections, intestinal parasites, leprosy, tuberculosis, and leishmaniasis are common in the country. Malaria is also seen in lowland more tropical valleys but not at elevations. With poor sanitation, lack of experienced medical providers, and lack of resources, epidemics occur frequently and with a high rate of morbidity (injury) and mortality (death). Further, they report there are occasional outbreaks of infectious diseases of an unknown etiology with no available resources or technology to uncover the infectious organism; and thus the most effective treatment and prevention.

The rapid rate of increase in HIV in India is likely to increase infection rates in Nepal as well through sex trafficking and migration. According to United Nations (UNAIDS) data for 2012, approximately 59,000 persons aged 15 to 49 in Nepal had HIV; a prevalence rate was 0.3%. It’s incidence in rural Nepal is currently unpublished.

Other serious health problems include childhood malnutrition, blunt and penetrating trauma, thyroid disease, cancer, chronic bronchitis (there are no chimneys in houses), hyperlipidemia, and what our team found last summer, alcoholism.

Nepali National Healthcare

The Nepali national health system was introduced as the “General Health Plan in 1956” (part of their national Development Plan). It was expanded over the years while focusing on primary health care. A comprehensive network-like health care system was developed; the most basic unit is a sub-health post or health post in each village development area. It was noted that the expansion of the national health system was not matched by an expansion in medical resources, including workers, education, and supplies; though and the available resources were not efficiently distributed. Political turmoil and corruption have plagued the country since that time and have all but lead to a disintegration of the network created 50+ years ago. As Wongchu says, “they’re garbage” (speaking of politicians).
Insufficient resources have been and currently are available for preventive and promotive health programs (such as prenatal care, smoking cessation programs, and HIV education). Since the Maoist insurgence of 1996, and the abolition/massacre of the Nepali monarchy in 2001, the current Nepali government has introduced a health policy encouraging the private sector to invest in the production of health care workers, expansion of health care resources, and in providing quality health services; in other words handing over control of their healthcare to outside agencies. As a result, several private health institutions have been founded, private hospital and clinics built, and Nepalis are becoming more and more dependent and less self-sufficient. Expats are expected to orchestrate and manage medical infrastructure, and develop the human resources required by the Nepali people for their health care; but this is an inefficient practice and a national time bomb if and when these groups pack up and leave the nation. (See Harvard MDs and Papua New Guinea experience).

Per World Health Organization (WHO) reviews, in 2011 Nepali government annual funding for health care was approximately US$68 per person. Government allocation for health care was around 5.4% of their budget for 2011 (For reference, the developing world average is around 6%, in Papua New Guinea it’s 3%).

In 2003, Nepal had 10 medical centers, 83 primary hospitals, 700 health posts, and 3,158 sub-health posts (which serve the remote villages). Some of these government hospitals, health posts, and sub-health posts have already closed; but NGO based clinics here increased in some regions with the government policy change. There is one sub-health post in the region we will be serving with one government and one private “hospital” two healthy days walk away.

In 2012, there were 1,259 physicians in Nepal (one for every 18,400 persons) with most based in Kathmandu. Per the Nepali Nursing Council, there were 19,100 nurses, 19,800 midwives, and some 750 foreign nurses working in Nepal as well.

In spite of those figures, some improvements in health care have been made, most notably significant progress in maternal-child health. Improvements include:

- Mortality during childbirth: from 850 in 100,00 mothers in 1990 to 280 in 2011
- Under-five infant mortality: from 162 per 1,000 live births in 1990 to 42 in 2011
- Childhood malnutrition: from 72% in 2001 to 38.8% in 2009

This improvement has been tied to outside NGO influences and not from direct governmental actions. Medical educators at Paten Hospital in Kathmandu, are ramping up their curriculum to meet these needs, but their influence outside of Kathmandu still is not at desired levels of penetration.
Access, Infrastructure, or Training

According to the United Nations, approximately one-half of the Nepalese people live in poverty and this poverty is more concentrated in rural villages (although widely visible in the capitol of Kathmandu as well). These villages are often located in remote, mountain villages that are geographically isolated and far from basic services; much in the same way as villages are in Papua New Guinea. Many people migrate annually from the mountainsides to Kathmandu looking for employment, opportunity, and modern “quality of life” amenities.

Rural healthcare services are substandard by any U.S. measure and poor by international standards, with government health posts often going unstaffed and/or undersupplied for months at a time. Further, low literacy rates are a barrier to improving local health care delivery programs and training local populations.

The Central Department of Population Studies at Tribhuvan University (Kathmandu, Nepal), and Centre for Population Studies at London School of Hygiene and Tropical Medicine, looked at the issue of access vs infrastructure in these remote regions of Nepal. Their study suggested quality infrastructure was more important but did not address the issue of training.

At Stanford, we are addressing both in the Solukhumbu region (improved infrastructure and local population education).

What Can One Student/Individual Really Do?

An example: “Med student brings health care to rural Nepal”

by Mark Valdez. Brown Daily Herald, Staff Writer: Tuesday, December 6, 2011

Though Dan Schwarz MD ’12 will not receive his medical degree for six months, he already oversees the operations of an international public health organization.

Schwarz serves as the chief operating officer of Nyaya Health, a U.S.-based non-profit organization that aims “to provide free community-based health care in rural Nepal that strengthens the public sector,” according to the organization’s mission statement.

He began volunteering with the nonprofit in 2009. Early the next year, he took academic leave from the Albert Medical School and moved to Nepal to work with the organization full time.

Founded in 2006 by three Yale students, Nyaya Health has become a driving force in providing health care in the community of Achham, an area that was in “substantial need of services,” Schwarz said.
Nyaya — which is affiliated with Partners in Health, a prominent public health non-profit — founded a clinic in 2008 that provided outpatient-based services, Schwarz said. A year later, Nyaya opened a full-scale hospital, which has treated almost 100,000 patients to date, he said.

Nyaya has also created opportunities for employment in the region. “We have a staff approaching 150 people in the hospital and in the community, and they’re all local Nepali people who are employed and otherwise did not previously have jobs,” Schwarz said.

In addition to the staff, the organization employs four Nepalese doctors.

Schwartz has said new technology has proven helpful in running the organization effectively. Through Global Health Delivery Online, which he likened to Facebook for health care providers, he has been able to coordinate efforts with a hospital in a neighboring region.

“I think, for me, what most is rewarding and most important, is a development of a health system where there previously was none,” Schwarz said. “And, the opportunity to say every day that there is health care being provided to people who previously did not have any access to care at all.”

References:


