Disease in developing countries

Try to imagine a disease that has symptoms that include acute watery diarrhea, vomiting, suppression of urine, rapid and severe dehydration, fall of blood pressure, cramps in legs and abdomen, and subnormal temperature leading to a complete organic collapse and death within 24 hours unless prompt medical treatment is given to the patient. The disease, cholera, is still considered to be a global pandemic despite the fact that its causes were discovered 150 years ago.

The spread of cholera in recent years reflect a lack of international standards in some countries which have primitive public water supplies and inadequate sanitary regulations. Cholera is an infection caused by the bacteria *Vibrio cholerae*. People become infected by drinking water or eating food contaminated by the bacteria.

In 1854, London was the densest settlement on the planet, with 2.5 million people crammed into 30 square miles and an infrastructure invaded by sewage which allowed the virus to enter. They are similar conditions to what can be found in many cities in the developing world today. As the cholera outbreak took hold, Dr. John Snow, a physician whose ideas about this disease had been dismissed by the scientific community, was nevertheless convinced that he knew how it was being transmitted. The national bestseller *The Ghost Map* by Steven Johnson is the story about Dr. Snow’s effort to solve the most pressing medical riddle of the times. It is a book that every community college health services major should consider.

One of the many challenges of low income countries, where most people are poor, is how to combat disease. The major reason for this problem is the lack of an adequate health care infrastructure. For example, half of the children in Haiti are unvaccinated and only 40% of the population has access to basic health care. Ninety percent of Haiti’s children suffer from waterborne diseases and intestinal parasites. Unsafe water, along with inadequate housing and unsanitary living conditions, contributes to the high incidence of infectious diseases. There is a chronic shortage of health care personnel, and hospitals lack resources, a situation that became readily apparent after the January 2010 earthquake. So, developing countries already bear more than 80% of the burden of chronic illnesses. The World Health Organization expects deaths from non-communicable diseases to rise by 15% between 2010 and 2020, with jumps of over 20% in Africa and South-East Asia. It is no surprise that most people in such countries are at high risk for major infectious diseases.