Life Expectancy Rises Around the World, Study Finds

by SABRINA TAVERNESE • DEC. 13, 2012

A sharp decline in deaths from malnutrition and infectious diseases like measles and tuberculosis has caused a shift in global mortality patterns over the past 20 years, according to a report published on Thursday, with far more of the world's population now living into old age and dying from diseases mostly associated with rich countries, like cancer and heart disease.

The shift reflects improvements in sanitation, medical services and access to food throughout the developing world, as well as the success of broad public health efforts like vaccine programs. The results are striking: infant mortality declined by more than half from 1990 to 2010, and malnutrition, the No. 1 risk factor for death and years of life lost in 1990, has fallen to No. 8.

At the same time, chronic diseases like cancer now account for about two out of every three deaths worldwide, up from just over half in 1990. Eight million people died of cancer in 2010, 38 percent more than in 1990. Diabetes claimed 1.3 million lives in 2010, double the number in 1990.

“The growth of these rich-country diseases, like heart disease, stroke, cancer and diabetes, is in a strange way good news,” said Ezekiel Emanuel, chairman of the department of medical ethics and health policy at the University of Pennsylvania. “It shows that many parts of the globe have largely overcome infectious and communicable diseases as a pervasive threat, and that people on average are living longer.”

In 2010, 43 percent of deaths in the world occurred at age 70 and older, compared with 33 percent of deaths in 1990, the report said. And fewer child deaths have brought up the mean age of death, which in Brazil and Paraguay jumped to 63 in 2010, up from 30 in 1970, the report said. The measure, an average of all deaths in a given year, is different from life expectancy, and is lower when large numbers of children die.
But while developing countries made big strides the United States stagnated. American women registered the smallest gains in life expectancy of all high-income countries’ female populations between 1990 and 2010. American women gained just under two years of life, compared with women in Cyprus, who lived 2.3 years longer and Canadian women who gained 2.4 years. The slow increase caused American women to fall to 36th place in the report’s global ranking of life expectancy, down from 22nd in 1990. Life expectancy for American women was 80.5 in 2010, up from 78.6 in 1990.

“It’s alarming just how little progress there has been for women in the United States,” said Christopher Murray, director of the Institute for Health Metrics and Evaluation, a health research organization financed by the Bill and Melinda Gates Foundation at the University of Washington that coordinated the report. Rising rates of obesity among American women and the legacy of smoking, a habit women formed later than men, are among the factors contributing to the stagnation, he said. American men gained in life expectancy, to 75.9 years from 71.7 in 1990.

Health experts from more than 300 institutions contributed to the report, which provided estimates of disease and mortality for populations in more than 180 countries. It was published in The Lancet, a British medical journal.

The World Health Organization issued a statement on Thursday saying that some of the estimates in the report differed substantially from those done by United Nations agencies, though others were similar. All comprehensive estimates of global mortality rely heavily on statistical modeling because only 34 countries — representing about 15 percent of the world’s population — produce quality cause-of-death data.

Sub-Saharan Africa was an exception to the trend. Infectious diseases, childhood illnesses and maternity-related causes of death still account for about 70 percent of the region’s disease burden, a measure of years of life lost due to premature death and to time lived in less than full health. In contrast, they account for just one-third in South Asia, and less than a fifth in all other regions. Sub-Saharan Africa also lagged in mortality gains, with the average age of death rising by fewer than 10 years from 1970 to 2010, compared with a more than 25-year increase in Latin America, Asia and North Africa.

Globally, AIDS was an exception to the shift of deaths from infectious to noncommunicable diseases. The epidemic is believed to have peaked, but still
results in 1.5 million deaths each year.

Over all, the change means people are living longer, but it also raises troubling questions. Behavior affects people’s risks of developing cancer, heart disease and diabetes, and public health experts say it is far harder to get people to change their ways than to administer a vaccine that protects children from an infectious disease like measles.

“Adult mortality is a much harder task for the public health systems in the world,” said Colin Mathers, a senior scientist at the World Health Organization.

Tobacco use is a rising threat, especially in developing countries, and is responsible for almost six million deaths a year globally. Illnesses like diabetes are also spreading fast.

Original URL: