New Report Says Economic Development Could Change Worldwide Face of Cancer

American Cancer Society Report Released on World Cancer Day

ATLANTA, February 4, 2011—A new American Cancer Society report says cancers associated with lifestyles and behaviors related to economic development, including lung, breast, and colorectal cancers, will continue to rise in developing countries if preventive measures are not widely applied. The finding comes from the second edition of Global Cancer Facts & Figures and its academic publication, Global Cancer Statistics, published in CA: A Cancer Journal for Clinicians. Both publications are being released on World Cancer Day, Feb. 4, 2011. The latest edition of Global Cancer Facts & Figures includes a special section on cancer in Africa, where according to the International Agency for Research on Cancer (IARC) about 681,000 new cancer cases and 512,400 cancer deaths occurred in 2008, numbers that are projected to nearly double by 2030 due to growth and ageing of the population.

According to estimates from IARC, there were approximately 12.7 million new cancer cases worldwide in 2008, 5.6 million of which occurred in economically developed countries and 7.1 million in economically developing countries. There were approximately 7.6 million cancer deaths worldwide in 2008, 2.8 million of which occurred in economically developed countries and 4.8 million in economically developing countries. By 2030, the global cancer burden is expected to nearly double, growing to 21.4 million cases and 13.2 million deaths. And while that increase is the result of demographic changes – a growing and aging population – it may be compounded by the adoption of unhealthy lifestyles and behaviors related to economic development, such as smoking, poor diet, and physical inactivity.

An accompanying editorial (appearing in CA:) by Otis W. Brawley, M.D., chief medical officer of the American Cancer Society, says about 2.6 million of the 7.6 million cancer deaths that occurred in 2008, or about 7300 cancer deaths per day, were potentially avoidable through the prevention of known risk factors, including tobacco use, dietary factors, certain infections, and alcohol use. “The worldwide application of existing cancer control knowledge according to the capacity and economic development of countries or regions could lead to the prevention of even more cancer deaths in the next 2 to 3 decades,” writes Dr. Brawley. “In order to achieve this, however, national and international public health agencies, governments, donors, and the private sectors must play major roles in the development and implementation of national or regional cancer control programs worldwide.”

A comparison of cancer rates reveals differences in cancer causation between economically developed and economically developing countries. In economically developed countries, the three most commonly diagnosed cancers in 2008 were prostate, lung, and colorectal cancers in men and breast, colorectal, and lung cancers in women. In economically developing countries, cancers of the lung, stomach, and liver were most frequently diagnosed in men while breast, cervical, and lung cancers were the most commonly diagnosed in women. Two of the three leading cancers in men (stomach and liver) and one of the three leading cancers in women (cervix) in developing countries are related to infection. Overall, about one in four cancers in developing countries are related to infection compared to fewer than one in ten in developed countries.

The report also outlines shifts in cancer trends that point to the increasing impact that unhealthy behaviors are

beginning to have in developing countries. While male lung cancer death rates are decreasing in most Western countries, they are increasing in China and several other countries in Asia and Africa where the tobacco epidemic is in earlier stages and smoking prevalence has not begun to drop, or even continues to increase. Lung cancer rates in women, which have plateaued in the US, are also increasing in many countries, notably in Spain, France, Belgium, and the Netherlands, where rates are increasing among younger women suggesting that lung cancer in females in these countries will likely increase for several decades barring major interventions.

Breast cancer is now the leading cause of cancer death among females in economically developing countries, a shift from previous decades during which cervical cancer was the most common cause of cancer death. Colorectal cancer incidence rates, which have been decreasing in the US, are rapidly increasing in several countries historically at low risk, including Spain and a number of countries within Eastern Asia and Eastern Europe.

Special Section: Cancer in Africa

Global Cancer Facts & Figures 2nd edition includes a special section on cancer in Africa, where the disease is an emerging public health problem. According to IARC, about 681,000 new cancer cases and 512,400 cancer deaths occurred in 2008 in Africa. These numbers are projected to nearly double (1.28 million new cancer cases and 970,000 cancer deaths) by 2030 due to the aging and growth of the population, with the potential to be even higher due to the adoption of behaviors and lifestyles associated with economic development and urbanization such as smoking, unhealthy diet, and physical inactivity.

The report says despite this growing burden, cancer continues to receive low public health priority in Africa, largely because of limited resources and other pressing public health problems, including communicable diseases such as AIDS/HIV infection, malaria, and tuberculosis.

Cancers related to infectious agents (cervix, liver, Kaposi sarcoma, urinary bladder) are among the dominant forms of cancer in Africa. In 2008, cervical cancer accounted for 21 percent of the total newly diagnosed cancers in females and liver cancer accounted for 11 percent of the total cancer cases in males.

A majority of cancers in Africa are thought to be diagnosed at advanced stage of the disease largely because of lack of screening and early detection services as well as limited awareness of the early signs and symptoms of cancers among the public and health care providers. Stigma associated with a diagnosis of cancer also plays a role in late stage presentation in most parts of Africa.

Survival after a diagnosis of cancer is much poorer in Africa than in the developed world for most cancer types, especially those cancers affected by screening and treatment. For example, the five-year survival rate for breast cancer is less than 50 percent in The Gambia, Uganda, and Algeria, compared to nearly 90 percent in the United States.

While tobacco use is the most preventable cause of cancer death worldwide, accounting for 20 percent of cancer

deaths, it accounts for only about 6 percent of cancer deaths in Africa. The smaller contribution of tobacco use to cancer deaths in Africa reflects the early stage of the tobacco epidemic and low smoking prevalence, especially in women. However, cigarette consumption is increasing in many African countries due to the adoption of behaviors associated with economic growth and increased marketing by tobacco companies. The smoking pattern among teens is even more disturbing. According to the Global Youth Tobacco Survey, in some African countries, the smoking prevalence among boys is higher than that among adults. Although a majority of African countries have ratified the Framework Convention on Tobacco Control, few have implemented or enforced tobacco control programs according to the guidelines.

This September, the United Nations will hold a high-level meeting to develop a global response to the growing threat of non-communicable diseases, including cancer, heart disease, and diabetes. This meeting, supported by the United States government, is only the second meeting the United Nations has held on a global health issue.

About The American Cancer Society

The American Cancer Society combines an unyielding passion with nearly a century of experience to save lives and end suffering from cancer. As a global grassroots force of more than three million volunteers, and with programs in more than 20 countries, we fight for every birthday threatened by cancer in communities worldwide. We save lives by helping people stay well by preventing cancer or detecting it early; by helping people get well by being there for them during and after a cancer diagnosis; by finding cures through investment in groundbreaking discovery; and by fighting back by rallying lawmakers to pass laws to defeat cancer and by rallying people across the globe to join the fight. As a global leader in cancer research investment, we turn what we know about cancer into what we do. To learn more or to get help, and for more information on our global programs, visit www.cancer.org/global