Breast Cancer Incidence, Death Rates Rising in Some Economically Transitioning Countries

September 10, 2015– A new study finds breast cancer incidence and death rates are increasing in several low and middle income countries, even as death rates have declined in most high income countries, despite increasing or stable incidence rates. The findings come from a new report examining global patterns and trends in breast cancer using the most up-to-date cancer registry-based data available. It appears early online in *Cancer Epidemiology Biomarkers and Prevention*.

Breast cancer is the most commonly diagnosed cancer among all women worldwide overall and in 140 of the world's 184 countries, representing one-quarter of all cancers diagnosed in women. It is also the leading cause of cancer deaths among women globally. Although once primarily considered a disease of Western women, 52% of new breast cancer cases and 62% of deaths now occur in economically developing countries.

Researchers led by Carol E. DeSantis, MPH, a senior epidemiologist for the American Cancer Society, used data from the International Agency for Research on Cancer (IARC) and the World Health Organization (WHO) to examine international trends in incidence and death rates from 39 and 57 countries, respectively.

The researchers found that breast cancer incidence rates are increasing in most countries, including those with historically higher rates, such as those in Europe, as well as in many countries in Latin America, Asia, and Africa, regions with historically lower incidence rates. Incidence rates are stable in North America and Oceania in the most recent period, while rates have declined in four European countries and Israel.

In contrast to incidence trends, breast cancer death rates have decreased in most countries. Most of the decreasing trends, as well as the most rapid declines, occurred in high income countries as a result of improved breast cancer treatment and early detection through mammography.

But while death rates are dropping in most countries, the study finds death rates have increased in ten countries, most of them economically transitioning and many in Central and South America. The countries are: Colombia, Ecuador, Japan, Brazil, Egypt, Guatemala, Kuwait, Mauritius, Mexico, and Moldova.

"Mortality rates are decreasing in most high income countries, even as incidence rates are increasing or stable," said DeSantis. "That's the good news. But of real concern are increasing incidence and mortality rates in a number of countries, particularly those undergoing rapid changes in human development."

The increase in breast cancer incidence in developing countries is likely due to an increase in risk factors associated with economic development and urbanization, including obesity; adaptation of a Western-type diet; physical inactivity; delayed childbearing; having fewer children; earlier age at menarche; and shorter duration of breastfeeding.

The report concludes that "it is necessary to increase awareness about breast cancer and the benefits of early detection, most notably in economically transitioning countries, in order to successfully implement breast cancer control programs, as well as to improve access to treatment."

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