Cancer in Latin America and the Caribbean

Cancer is the 2nd leading cause of death in the Americas. In 2005 approximately 1.15 million people died of cancer in this Region, and 480,000 of the cases were from countries in Latin America and the Caribbean (LAC). The highest cancer mortality rates are observed in Uruguay, Barbados, Peru, Argentina and Chile.

As shown in Figure 1, there is a trend of increasing mortality in most countries. By 2030, it is projected that over 1.6 million people will die from cancer; an increase attributed to demographic changes and increased exposure to risk factors.

The most common cancers among men include stomach, prostate, lung and colorectal cancers; and among women, cervix, breast, stomach and colorectal cancers.

Figure 1: Trends in Cancer Mortality

Source: PAHO Mortality Database
Cancer Risk Factors

**Tobacco use** in Latin America and the Caribbean ranges widely, with the highest rates in the Southern Cone countries where approximately 38.6% of males and 29% of females smoke; to lower rates in Central America where 9% of males and 1.4% of females smoke.

**Overweight and obesity** prevalence is continuously increasing throughout the Region. In Mexico, for example, it is estimated that 68% of the population is overweight, while 24% of males and 34% of females are obese. In South American countries the prevalence of overweight ranges from a low of 41% to 73%. In Central America and the Caribbean, prevalence of overweight is as high as 65% and obesity as high as 31%.

**Environmental and occupational risk factors.** It is estimated that 2%-4% of cancers can be attributed to exposure to carcinogens in the workplace. Occupational exposure to pesticide, tobacco smoke, sun, asbestos, benzene, and crystalline silica among many other compounds are well-documented causes of cancer (3). In the Americas, lung cancer caused by workplace exposure is estimated to be 5% - 8% (1). Deaths (per thousands) from malignant mesothelioma, in the region caused by workplace exposure is estimated to be 0.7- 2.2.

In Brazil, up to 5% of the labor force in the formal economy only is exposed to crystalline silica(6). In Bolivia, Chile, and Colombia, between 15%-22% of miners suffered from silicosis(7).

**South America**

Cancer accounts for an increasing percent of the disease burden in South America. In fact, with the exception of Argentina and Uruguay, where the risk is higher, the probability of developing cancer before age 65 in South American countries is approximately 10 to 12.4 percent. To this extent, at least 400,000 people died of cancer in South America in 2005. Brazil was the greatest contributor in the region to cancer mortality as 190,000 people died of cancer in 2005.

Among men, prostate cancer has the highest incidence in most South American countries; in Ecuador and Chile stomach cancer accounts for the highest incidence and in Argentina and Uruguay lung cancer has the highest incidence. As shown in Figure 2, based on 2002 data, the most recent available, the top causes of cancer mortality affecting men in South America are prostate, lung and stomach cancers, with the exception of Argentina, Bolivia and Uruguay where the 3rd most common cause of cancer mortality in men is colorectal cancer. Of note is that Uruguay has the highest lung cancer mortality rates among men in the region with approximately 50 per 100,000. This reflects the high rates of tobacco use in the country where at least 35% of males and 26% of females smoke cigarettes daily.
Among women, cervical cancer is the most common cancer in the Andean region while in the Southern Cone countries the most common cancer is breast cancer (Figure 3). In addition to being the most common, these two cancers cause the greatest cancer mortality in the region among women with the exception of in Chile and in Ecuador where the primary cause of cancer mortality among women is stomach cancer.
Central America

In 2005, at least 101,000 people died of cancer in Central America and the Caribbean. The risk of developing cancer before the age of 65 is slightly lower in Central America than in South America; Panamanians have the lowest probability of developing cancer of only 5%-7.4% while in all other Central American Countries the risk is approximately 7.5%-9.9%. Despite the lower risk of developing cancer in Central America, five year survival rates tend to be lower than in the rest of the region. More specifically, while in the majority of Latin American countries the five year survival rate is between 2 and 8 percent, in several Central American Countries including Honduras and Guatemala the five year survival rate is below two percent. The low survival rate, despite the prevalence of the same cancers may reflect poor early detection and screening programs and lack of quality treatment once diagnosed.

Figure 4: Cancer Mortality Rates In Central America, 2002 (Age Standardized)

<table>
<thead>
<tr>
<th>Country</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costa Rica</td>
<td>125.0</td>
</tr>
<tr>
<td>El Salvador</td>
<td>102.0</td>
</tr>
<tr>
<td>Guatemala</td>
<td>93.0</td>
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<tr>
<td>Honduras</td>
<td>139.0</td>
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<tr>
<td>Mexico</td>
<td>88.0</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>120.0</td>
</tr>
<tr>
<td>Panama</td>
<td>108.0</td>
</tr>
</tbody>
</table>


Caribbean

Cancer mortality rates in the Caribbean are lower than the Regional average. The notable exceptions are Haiti (83/100,000) and Antigua and Barbuda (167/100,000).

Among men in the sub-region, prostate cancer is the leading cause of cancer-related mortality, followed by stomach, lung and colorectal cancer. Of note is that liver cancer is the leading cause of cancer mortality in Haiti. Breast cancer and cervical cancer are the primary causes of cancer-related mortality among women in the sub-region, in addition to colorectal and liver cancers.
**Conclusions**

The growing burden of cancer, as a proportion of the total burden of disease, necessitates that countries in LAC recognize cancer prevention and awareness as a public health priority.

Policy makers as well as healthcare workers should be made aware of the burden of cancer in their particular country and of the importance of developing comprehensive cancer control programs.

The WHO recommends a three-step process for planning national cancer control programs, including:

- investigating the cancer problem
- formulating policy, defining target populations; and
- identifying steps to implement the program.

**References**


PAHO, *Regional Core Health Data Initiative. Table Generator System.* Available at: [http://www.paho.org/English/SHA/coredata/tabulator/newTabulator.htm](http://www.paho.org/English/SHA/coredata/tabulator/newTabulator.htm)

