1. An Increasing Threat

Non-communicable diseases (NCDs), such as cardiovascular diseases, cancer, diabetes mellitus and chronic respiratory diseases generate a heavy burden in the Latin America and the Caribbean region. Cardiovascular diseases (CVDs) cause nearly a third of all deaths, while malignant and other neoplasms cause one in six. Although there are large variations across countries, some face a heavy double burden of disease as communicable diseases, maternal, perinatal, and nutritional conditions remain important causes of death and disability. In addition, injuries, particularly intentional, add to the burden (Figure 1).

Even though NCDs represent a larger share of the burden of disease in higher income members of the Organization for Economic Cooperation and Development (OECD) than in the Latin America and the Caribbean (LAC) region, age standardized death rates due to these diseases are much higher in the region (Figure 2). For instance, the LAC region has some of the highest diabetes death rates in the world (WHO 2011a). However, the region has to confront these diseases with fewer resources.

NCDs represent an increasing economic and development threat to households, health systems, and economies in the region. These conditions require continuous contact with the health system for long periods of time and, if not controlled, can result in costly hospitalizations. They also generate large productivity losses due to worker absenteeism, disability, and premature deaths. In addition, out-of-pocket payments for services and medicines can impoverish households with members with these conditions (World Bank 2011). In 2010, according to a study by the World Economic Forum and the Harvard School of Public Health (Bloom et al 2011), the cost attributable to cardiovascular diseases to health systems in Latin America and the Caribbean, except Cuba, was about US$10 billion and the total productivity cost was around US$19 billion (Table 1).

This health and economic burden caused by NCDs is growing partly due to an aging population. The share of the population older than 60 years grew 5.4 times between 1950 and 2005 and is expected to almost quadruple between
2. Modifiable Risk Factors

Because they share common risk factors that can be partially addressed through public policy changes, many NCDs are preventable. Cardiovascular diseases, cancers, chronic respiratory conditions, and diabetes share a number of intermediate risk factors, including high blood pressure, high blood glucose, abnormal blood lipids, and overweight or obesity (WHO 2005). These intermediate factors are the result of common modifiable risk factors such as unhealthy diets, physical inactivity, tobacco use, and the harmful use of alcohol (which is also a risk factor for road traffic accidents and violence).

Table 1: Costs attributable to CVD in 2010 in the Americas (US$ billions)

<table>
<thead>
<tr>
<th>The Americas Region</th>
<th>Total Costs (without productivity costs)</th>
<th>Productivity costs</th>
<th>Total costs (including productivity costs)</th>
<th>Per capita total costs</th>
<th>Per capita total costs (adults only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMR-A (USA, Canada and Cuba)</td>
<td>165.9</td>
<td>108.2</td>
<td>274.0</td>
<td>736</td>
<td>1,206</td>
</tr>
<tr>
<td>AMR-B (all other countries in the region)</td>
<td>8.8</td>
<td>17.2</td>
<td>26.0</td>
<td>52</td>
<td>108</td>
</tr>
<tr>
<td>AMR-D (Bolivia, Ecuador, Guatemala, Haiti, Nicaragua and Peru)</td>
<td>0.9</td>
<td>2.1</td>
<td>3.1</td>
<td>36</td>
<td>91</td>
</tr>
</tbody>
</table>

Source: Bloom et al 2011

Table 2: Daily Calorie Intake per Adult Equivalent in Central American Countries (in percentage)

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>0 - 1,165</td>
<td>12.2</td>
<td>28.8</td>
<td>29.5</td>
<td>27.6</td>
</tr>
<tr>
<td>1,165 - 2,755</td>
<td>49.2</td>
<td>54.5</td>
<td>57.1</td>
<td>55.7</td>
</tr>
<tr>
<td>2,755 - 4,132</td>
<td>26.7</td>
<td>15.4</td>
<td>11.1</td>
<td>11.4</td>
</tr>
<tr>
<td>4,133 - 5,510</td>
<td>8.1</td>
<td>1.2</td>
<td>1.9</td>
<td>3.0</td>
</tr>
<tr>
<td>5,510 &amp; over</td>
<td>3.8</td>
<td>0.1</td>
<td>0.4</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Source: Bonilla-Chacín ME, Vázquez M (in preparation)
Despite the shortage of information on dietary patterns across time, data from countries where some information is available suggest that a large percentage of households have unhealthy high calorie diets (Table 2). These energy dense diets combined with sedentary lifestyles are likely responsible for the large percentage of overweight and obese adults (Figure 3). In most countries, this percentage is higher among women than men. In several countries, these high rates of overweight and obesity coexist with high rates of chronic malnutrition. Three of the four countries in the world with the highest percentage of overweight mothers and malnourished children are Guatemala with 13 percent of households, Bolivia with 11 percent, and Nicaragua with 10 percent (Garrett et al 2003). Often these conditions are related; for instance, low birth weight and child malnutrition have been associated with increases in the rates of hypertension, cardiovascular diseases and diabetes (WHO 2003).

Figure 3: Percentage of Adults Older than 20 Years Overweight or Obese (2008) (Body Mass Index> 25 – age standardized)

Source: WHO 2011b

Around 27.4 percent of adult men and 14.4 percent of adult women in the region smoke tobacco. In the Southern Cone countries, Cuba, and Venezuela between a third and two-fifths of adult men and between a quarter and a third of adult women currently smoke. Smoking prevalence is also quite high among youth. Data from the WHO Global Youth Tobacco surveys show that Chile has the fourth largest prevalence of youth tobacco smoking among women in the world. Among male youth, Ecuador and Nicaragua are among the fifteen countries with highest tobacco prevalence with 31 and 30 percent respectively (WHO 2010, WHO 2011b, WHO 2011c, WHO 2011d).

The WHO ranks Belize, Ecuador, Guatemala, Mexico, Nicaragua, and Paraguay as the countries in the region with the highest alcohol-related health risk. These countries have the highest consumption of alcohol per drinker and the largest percentage of drinkers reporting binge drinking. In Ecuador, the average drinker consumed a staggering 29.9 liters of pure alcohol in 2005, followed by Mexico with 27 liters and Nicaragua with 20 liters (WHO 2011e).

3. Policy Options and the World Bank

The burden of NCDs is increasing and consequently the pressure on regional health systems is growing. In this context, treatment alone will not be fiscally sustainable as the cost of treating NCDs in general is much higher than that of communicable diseases (World Bank 2011). Thus the urgent need to promote healthy living in the region through population-wide multi-sectoral interventions to improve nutrition, promote physical activity, and reduce tobacco use and alcohol abuse. The role of the health sector is central to ensuring that multi-sectoral interventions to promote healthy lifestyles are designed and implemented along with targeted health care services. Also crucial is surveillance of NCDs and their risk factors. This function needs to be strengthened to improve information on the prevalence of NCDs and their risk factors and to respond adequately to the epidemic.

Governments in Latin America and the Caribbean are implementing multi-sectoral interventions to reduce the prevalence of NCDs risk factors. Some of these interventions fall within the list of interventions that WHO considers “Best Buys” (WHO 2011f).

To improve diets and increase physical activity, governments can promote public awareness about healthy diets and physical activity through mass and other media. An example of this type of policy to promote physical activity in the region is that of Agita Sao Paulo in Brazil (Matsudo et al 2002). To reduce salt content of food and trans fats, a promising experience in the region is that of the Argentinean program “Less Salt, More Life” (Menos Sal, Más Vida) and the government’s agreement with the industry to reduce sodium and trans fats in processed foods.
An example to evaluate of community-based interventions to promote healthy diets and physical activity is that of Mexico where measures have been taken to ban the sale of junk food and mandate physical activity classes in schools. Another example of community-based interventions aimed at promoting physical activity is that of Academia da Cidade in different Brazilian cities. Finally, the city of Bogota is an example to evaluate as a city with a built environment that promotes physical activity with its public transportation system, TransMilenio bus rapid transit, bike paths, and recreational bike routes (Sarmiento n.d.).

To reduce the prevalence of smoking, governments can increase current tax levels and harmonize this price level with neighboring countries. In addition, governments can enforce legislation to ensure smoke-free environments, marketing bans of tobacco products and restrictive warning labels. The tobacco control program in Uruguay is an example to evaluate.

To reduce alcohol abuse, governments can impose excise taxes on alcohol and impose more restrictions on access to retail alcohol. Some countries in the region do not impose taxes while others impose very low levels (WHO 2011e).

The World Bank supports many of these efforts through different knowledge, convening and financial services. For example, the Bank has developed knowledge activities in Jamaica, the Eastern Caribbean and Central America. Through lending operations, Bank projects have supported overall prevention and control programs and the strengthening of surveillance systems in Argentina, Uruguay, and Brazil. In addition, Bank projects support the financing of health services, including, NCD prevention and control interventions at the clinical level in the Dominican Republic and Panama. Finally, the Bank is currently carrying out a regional study on multi-sectoral approaches to promote healthy living and aging.

Sources


Sarmiento O, del Castillo AD n.d., Segura Durán E. Bogotá como ejemplo de ciudad que promueve la actividad física. (in preparation).


WHO 2011c. World Health Observatory Data Repository – Tobacco Control.


