Economic Investment Cases for Chronic Noncommunicable Diseases
Experience and lessons from LAC
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ECLAC Seminar on NCDs and their Impact on Sustainable Development in the Caribbean

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Objectives of Investment Cases

- Demonstrate the benefits of investing in a prioritized set of proven NCD interventions
- Estimate the burden of the health and economic costs associated with NCDs
The Lancet Taskforce on NCDs and economics 1

Investing in non-communicable disease prevention and management to advance the Sustainable Development Goals

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Reduction of the non-communicable disease (NCD) burden is a global development imperative. Sustainable Development Goal (SDG) 3 includes target 3.4 to reduce premature NCD mortality by a third by 2030. Progress on SDG target 3.4 will have a central role in determining the success of at least nine SDGs. A strengthened effort across multiple sectors with effective economic tools, such as price policies and insurance, is necessary. NCDs are heavily clustered in people with low socioeconomic status and are an important cause of medical impoverishment. They thereby exacerbate economic inequities within societies. As such, NCDs are a barrier to achieving SDG 1, SDG 2, SDG 4, SDG 5, and SDG 10. Productivity gains from preventing and managing NCDs will contribute to SDG 8, SDG 11 and SDG 12 offer clear opportunities to reduce the NCD burden and to create sustainable and healthy cities.

Introduction

This Lancet Taskforce about non-communicable diseases (NCDs) and economics explores a common agenda in ministries of health, ministries of finance, and other sectors. Historically, there have been low returns on prevention and management of NCDs, with limited gains in global adult NCD mortality (for people aged 50–69 years) but at a much faster rate in high-income countries (HICs) and upper-middle-income countries (UMICs) than in low-income countries (LICs) and low-middle-income countries (LMICs).
More than 40% of NCD deaths are premature deaths under the age of 70

Mortality among people in their most productive years has a significant impact on economic development and can undermine progress.

The projected cumulative lost output due to NCDs in LMICs for 2011–2025 is 7 trillion USD.

This far outweighs the estimated 11.2 billion USD cost of implementing a set of high-impact, cost-effective interventions to reduce the burden of NCDs.

Multiple Purposes of National Investment Cases

- Quantifying the economic burden
- Country-specific evidence for policy makers
- Informed decisions and priority setting
- Institutional context analysis to understand political economy, stakeholders, industry involvement
Jamaica, Tanzania, and Mongolia

Context matters

“We can’t get the medicines to people and when we do, they don’t **adhere**. All we can do is try to educate and prevent.”

“Men like fluffy women.”

“Our traditional foods are very salty. People won’t change what they eat.”

“People have to drink to stay warm in the winter. What else can we offer to them?”
Methodological steps

1. Estimate mortality and morbidity
2. Estimate economic costs (direct + indirect)
3. Estimate the impact of interventions
4. Estimate the financial costs of the interventions
5. Evaluate the return on investment
NCDs are preventable with known interventions that work

### WHO’s “best buys” for NCD prevention and control

<table>
<thead>
<tr>
<th>Tobacco Use</th>
<th>Harmful use of Alcohol</th>
<th>Unhealthy Diet and Physical Inactivity</th>
</tr>
</thead>
</table>
| • Reduce affordability of **tobacco products**
  • Create, by law, completely **smoke-free environments**
  • Health information and warnings
  • Ban all forms of tobacco **advertising, promotion and sponsorship**
| • Regulating commercial and public **availability of alcohol**
  • Restricting or banning alcohol **advertising and promotions**
  • **Increase excise taxes** on alcoholic beverages
| • Reduce **salt intake**
  • **Replace trans fats** with unsaturated fats
  • Implement public awareness programs on **diet and physical activity**

Source: Appendix 3, WHO Action Plan
NCDs are treatable with known interventions that work

WHO’s “best buys” for NCD prevention and control

<table>
<thead>
<tr>
<th>Disease</th>
<th>Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular</td>
<td>• Counseling and drug therapy for those at high and moderate risk for heart</td>
</tr>
<tr>
<td>Disease</td>
<td>attacks and strokes</td>
</tr>
<tr>
<td></td>
<td>• Preventive foot care for people with diabetes</td>
</tr>
<tr>
<td></td>
<td>• Screening for diabetes patients for <strong>prevention of blindness</strong></td>
</tr>
<tr>
<td></td>
<td>• Glucose monitoring for people treated with insulin</td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td>• Vaccination against <strong>HPV</strong></td>
</tr>
<tr>
<td></td>
<td>• Cervical cancer screening for women ages 30 - 49</td>
</tr>
</tbody>
</table>

Source: Appendix 3, WHO Action Plan
Jamaica: Investment Case for the Prevention and control of NCDs
A return on investment analysis
Rachel Nugent, Vice President of NCDs, RTI International
### Results – Return on Investment

**ROI** =

\[
\text{Value of labor gained from saving lives} + \text{value of reduced absenteeism and presenteeism} + \text{Avoided health costs} \\
\text{Total Cost}
\]

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**Return on Investment, by NCD package (JMD Billions)**

<table>
<thead>
<tr>
<th>NCD intervention packages</th>
<th>5-year period</th>
<th>15-year period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total costs</td>
<td>Total benefits</td>
</tr>
<tr>
<td>Tobacco</td>
<td>0.45</td>
<td>0.36</td>
</tr>
<tr>
<td>Diabetes</td>
<td>1.80</td>
<td>2.20</td>
</tr>
<tr>
<td>CVD</td>
<td>1.49</td>
<td>1.45</td>
</tr>
<tr>
<td>Alcohol</td>
<td>0.48</td>
<td>0.22</td>
</tr>
<tr>
<td>All packages</td>
<td>4.22</td>
<td>4.23</td>
</tr>
</tbody>
</table>
Results – Economic Benefits

15-year time-span: Recovered economic output from implementing tobacco, alcohol, diabetes, and CVD clinical and policy interventions

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Billions (JMD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality or exit from the workforce (Indirect benefit)</td>
<td>43.3</td>
</tr>
<tr>
<td>Presenteeism (Indirect benefit)</td>
<td>2.1</td>
</tr>
<tr>
<td>Absenteeism (Indirect benefit)</td>
<td>1.9</td>
</tr>
<tr>
<td>Direct costs of treatment averted</td>
<td>29.8</td>
</tr>
<tr>
<td>Total economic benefits</td>
<td>77.1</td>
</tr>
</tbody>
</table>
Assess Costs to be Avoided

- **Direct Costs**
  - Healthcare expenditures

- **Indirect Costs**
  - Mortality
  - Workforce Productivity

### Costs

- **Government health expenditures**: $76.7 million
- **Private insurance health expenditures**: $6.7 million
- **Household OoP health expenditures**: $32.2 million
- **Absenteeism**: $10.4 million
- **Presenteeism**: $27.1 million
- **Smoking breaks**: $19.2 million
- **Premature mortality**: $91.3 million

**Total**: $264 million
On average, excess outcomes (hospitalizations, ICU admissions, and deaths) among those with obesity accounted for about 18.5%, 42.7% and 13.4% of COVID-19 hospitalizations, ICU admissions, and deaths respectively in 2020 across the eight countries.
Keys for Success – Economic Analysis

- Demand-driven analyses
- Build trust with all partners
- Small meetings with stakeholders across government and civil society to understand local NCD context
- Data sources: local when possible, and clearly sourced when not
- Simple modeling, explanation of methods
- Use webinars and workshops to communicate all aspects of analysis
Communicating the Story

- Results have, or will be, used to inform consideration of new legislation.
- Featured in speeches by the Ministers of Health and Finance to Parliament, and in local news media (Jamaica).
- Completed NCD or tobacco control investment cases in 20 countries, including Jamaica, Peru, Colombia, and El Salvador.
- Planned and ongoing in 16 countries, including Panama, Suriname, Guyana.
Barbados: National Workplace Wellness Policy 2019 was adopted to promote healthy lifestyles. The Policy’s rationale cites the findings of the NCD Investment Case mission and urges for cooperation and comprehensive action to fight NCDs.

Jamaica: After investment case in 2018, «Jamaica Moves» was expanded to include schools (in total 33 schools across the country have benefited from the initiative). In addition, a two-day camp was organized at which the participants were exposed to presentations aimed at sensitising them about some of the major NCDs, such as cancer, diabetes, heart attack and hypertension.
More Information

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