The Evaluation of the 2007 CARICOM Port-of-Spain NCD Summit Declaration

CHAPTER 3: National and regional trends in NCD mortality, morbidity and risk factors

POS EVALUATION GROUP
AIMS AND METHODS
Aims

For CARICOM member states:

• To describe recent trends in NCD mortality, morbidity and risk factors: 2000 to 2013

• To determine if they are on track to achieve the goal of reducing premature NCD mortality, by 25%, by 2025

• To identify gaps in current data on NCD mortality, morbidity and risk factors
Sources of Data

• The mortality data bases at CARPHA, PAHO/WHO and the Global Burden of Disease Study
• Population size and age structures from the UN Population Division and national census reports
• Risk factor surveys: WHO STEPS surveys, Global School Health and the Global Youth Tobacco Surveys
• Disease registers e.g. Barbados National Register
• WONDER database, Centres for Disease Control, USA
• NIH-funded project on disparities in health in the Caribbean and United States
• CARPHA scoping exercise for gaps in data and quality
Limitations, gaps, discrepancies in data

• No countries had risk factor data before and after the Port of Spain Declaration
• Jamaica and Haiti no mortality data to PAHO/WHO
• Smaller CARICOM states (8 with <90,000 population)
  – unstable mortality rates
  – not included in global level analyses
• PAHO/WHO and GBD sometimes show different trends e.g. Guyana
• Few countries with population based disease registers or standardised utilisation data
MAIN FINDINGS
Country LE in the Caribbean

“Monitoring variation within the Caribbean”
FIGURE. Life expectancy at birth in 1965-70 and 2005-10 among 21 Caribbean territories

<table>
<thead>
<tr>
<th>Territory</th>
<th>1965-70</th>
<th>2005-10</th>
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<tbody>
<tr>
<td>Puerto Rico</td>
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<tr>
<td>Cuba</td>
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<tr>
<td>Curacao</td>
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<tr>
<td>Jamaica</td>
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<td>USVI</td>
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<td>6</td>
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<tr>
<td>Bahamas</td>
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<tr>
<td>Antigua &amp; Barbuda</td>
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<td>8</td>
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<td>Trinidad &amp; Tobago</td>
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<td>Martinique</td>
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<td>French Guiana</td>
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<td>Barbados</td>
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<td>St. Vincent</td>
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<tr>
<td>Haiti</td>
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</tbody>
</table>

Source: WHO statistics 2005 Men aged 35 - 74, Standardised
Mortality Trends in CARICOM states
Major NCDs

• 76% premature deaths (30 – 69 yrs) from NCDs
• Caribbean - slowest rate of decline in premature NCD mortality of all sub-regions in the Americas
• CVD and diabetes-related mortality account for the largest declines in NCD-related deaths

Source: Comprehensive Meeting Report: Forum of Key Stakeholders in NCDs: Advancing the NCD Agenda in the Caribbean, June 2015, PAHO/WHO
Mortality trends in Guyana

Source: PAHO mortality database
Source: PAHO mortality database
cardiovascular disease and diabetes account for 30 to 40% of all deaths

% changes in mortality rates from cardiovascular disease and diabetes 2000 to 2010 (Hambleton et al)
Between country disparities

• There are large variations in NCD-related mortality between CARICOM members
• An understanding of the determinants of these differences is needed to design, implement and evaluate interventions to reduce them
• Much better use can be made of available data - regional institutions and CARICOM members
Country example: Belize (Morey et al)

Within-country disparities
INCIDENCE AND PREVALENCE DATA
Incidence of disease

• Very limited robust NCD incidence data
• Barbados has a population-based register
  – incident cancers, myocardial infarction and stroke.
• Jamaica Cancer Registry in city of Kingston
  – Cancer Incidence in capital city only
Prevalence of diabetes, hypertension

- From population based NCD STEPS and equivalent Risk Surveys in adults ≥ 25 years
- 12 CARICOM members have surveys since 2000
- 8 surveys within the past 5 years

- Overweight and obesity (1 in 2; to 4 out of 5 adults)
- Diabetes (1 in 10 to 1 in 4 adults)
- Hypertension (1 in 5 to over 1 in 2)
Detection, treatment and control:
Hypertension in Barbados (Health of the Nation 2012)
Risk excess by Gender

- Women twice as likely to be obese
- Women 60% more likely to have diabetes

- 1 in 5 men report binge drinking
- 10 - 20% men current tobacco smokers
- Rates of tobacco use and alcohol abuse are half or even lower in women
Trends in Risk Factors
Physical Activity Categories 2000 - 2008
Jamaica Healthy Lifestyles Surveys

% population

JHLS-2000
JHLSII-2008

High
Moderate
Low
Inactive
Risk in children 13 – 15 years (GSHS, GYTS: 18/20 countries)

In every member state

• < a third of school children with recommended levels of physical activity
• Childhood obesity: ≥ 10% in most countries
• Overweight and obesity is increasing in children
2. Meeting WHO NCD mortality targets: 25 by 2025

- WHO Global targets: 25% reduction in premature (30 - 69 years) NCD mortality by 2025
- Based on available PAHO data (Global Burden of Disease for Jamaica and Haiti), only 8 of the 20 CARICOM members are on course to meet this target
Conclusions and potential actions

• Make better use of available data to describe and monitor the NCD burden. E.g. social determinants analyses of available risk factor survey data and mortality data.
• Provide training to country epidemiologists in mortality and morbidity analysis facilitated by CDRC/UWI.
• Use a standardised format health facility-based data on NCDs
• Increase the number of NCD registries within the region in order to guide and evaluate interventions.
• Continue to provide training to physicians to improve the quality of death certification.
• Further investigate the basis of differences in trends in NCD mortality in order to design, implement and evaluate interventions to reduce these disparities.