Epidemiology and Treatment of Advanced Prostate Cancer in South America

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Disclosure

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General Facts

- Latin America and the Caribbean characteristics:
- 600 million inhabitants
- 10% of the world’s population
- Highest overall Human Development Index rating
- Major Inequalities
- Significant reductions in fertility
- Significant reductions in infant mortality
- Highest life expectancies among developing regions
Overall Cancer Burden in LA

- Incidence: 1.1M new cancer/year (7.8% world cases)
- Deaths/year: 600,000 cases
- Cancer mortality rates are relatively high
- Contributing factors to inferior outcomes:
  - Advanced stage at diagnosis
  - Limited access to effective treatment: 54% no health-care coverage
  - A sharp rise in cost (currently ~$4 billion annually)
  - Inequitable Distribution of Cancer Resources
Public vs. Private Coverage

Population covered by sector
- Public: 75%
- Private: 25%

Expenditures by sector
- Public: 40%
- Private: 60%

Salud Publica Mex. 2009; 51 (supl 2): 263-269

Source, INCA, MS, Brazil
Factors Accounting for Cancer Outcomes Disparities

- Health system infrastructure
- (Late) Stage at diagnosis
- Cancer care infrastructure (priority devices?)
- General population health and lifestyle
- Cancer “workforce”
- Patient Access & Availability of Cancer Medication

Disparities in cancer care

Presented By Alexandru Eniu at 2015 ASCO Annual Meeting
Access to Radiotherapy, 2013

FIGURE 3. Estimated Percentage of Patients Able to Access Radiotherapy, 2013.
Overall Prostate Cancer Burden in LA 1'

New cases

2012

134,000

43,000

2030

249,000

86,000

In Central America and the Caribbean, prostate cancer is the leading cause of cancer death in men, whereas it is the second leading cause of cancer deaths. There are more than 412,000 new cases and 85,000 deaths each year in the Americas.
Overall Prostate Cancer Burden in LA

Data Source: GLOBOCAN 2012
Trends in Prostate Cancer Incidence

Data Source: IARC WHO Mortality Cancer Database
Trends in Prostate Cancer Incidence and Mortality (all ages per 100.000)

Sierra et al. Cancer Epidemiology 44: 131–140, 2016
The highest prostate cancer incidence and mortality rates are found in the Caribbean, particularly Barbados, Trinidad, and Tobago. 

Incidence/Mortality Ratio of Prostate Cancer vs GDP per capita

PAHO 2014 2016
Mortality Trends *versus* Country

<table>
<thead>
<tr>
<th>Country</th>
<th>Mortality Trends</th>
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<tbody>
<tr>
<td>Brazil</td>
<td>↑</td>
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<tr>
<td>Cuba</td>
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Data Source: GLOBOCAN 2012
Actions to Improve Prostate Cancer Outcomes

- Increase financial resources for cancer control
- Restructure health-care systems
- Optimise oncology workforce to meet regional needs
- Improve technical resources and services for cancer prevention and treatment
- Invest in research and evidence-based cancer care relevant to the region
- Invest in education

Prostate Cancer Control Programmes

- Countries have recently made PC a priority in their national cancer plans and have developed guidelines for the detection, diagnosis, treatment, and f/u

  - Brazil (2002),
  - Colombia (2013)
  - Costa Rica (2011)
  - El Salvador (2015)
  - Mexico (2010)
  - Nicaragua (2010)
  - Peru (2010)

Sierra et al. Cancer Epidemiology 44: 131–140, 2016
CANCER TRIALS (CLINICALTRIALS.GOV)

- **190,954 studies** (190 countries)
- **48,313** studies in Cancer.

Source: www.ClinicalTrials.gov Accessed May 22\(^{nd}\), 2015
Institutional Guidelines
NCCN Prostate Cancer Guideline
Version I.2014

Version for Latin America - LACOG Panel of Reviewers

Meeting 21 February 2014, São Paulo, Brazil
Beat the Cancer!

Social Institute
Thank you!