Conversations that transform lives
How to address Venezuela’s Health Crisis

Overcoming the
“Knowledge-Blackout” in Venezuela:
The Role of the Health System

Marino J. González R.
Universidad Simón Bolívar
National Academy of Medicine of Venezuela
Houston, July 24th 2019
Common ground

- Venezuela in our mind
  - Family
  - Friends
  - History
  - Future

- Our “know how”

- Transform
Objectives

- Elements to cooperate

- What are the changes?
  - Personal level
  - Societal level

- Focus on solutions
Health Systems

- Intensive in knowledge
  - Major area of services
  - Major area of research
  - Source of innovations

- Reductions in knowledge
  - Losses in human resources
  - Low performance of services

- Political and economic contexts
• Determinants of health system performance

• Health conditions of Venezuelans

• Guidelines for transformation

• Actions
  • Now
  • Preparation for medium term
Blackout

- Lack of electricity
- Evident

Source: Satellital photo, March 9th. 2019
Other blackouts

- Progressive
- Long periods
Complex emergency

• One of the major collapses

• Humanitarian effects

• Systematic

• Systemic
Context

- Lack of electricity
  - Short-term impact
- Knowledge-blackout
  - Evolution
  - Long-term impact
• Lights: Enlightenment (Ilustración)

• (Moral y luces son los polos de una República, moral y luces son nuestras primeras necesidades).

• Moral and knowledge are the poles of a Republic, moral and knowledge are our first needs.

Angostura, February 15th 1819
Simón Bolívar

• It is the progress of knowledge that widens the progress of practice, and the uprightness of the spirit that widens the progress of knowledge.

Angostura, February 15th 1819
• **Venezuela**
  
  • The country in the Americas with the highest number of malaria cases until 1936.
  
  • One in three deaths was due to malaria
• Venezuela

• The first country certified by the World Health Organization (WHO) for having eradicated malaria from most of its territory.
Knowledge in action

• Why?
  • Luck?
  • Oil?
  • DDT?
Knowledge in action

- Strategy
- Action
- Research
- Creation and use of knowledge
Casos de malaria, Venezuela, 1937-1962

Source: Reports of the Ministry of Health
Knowledge and health
Back in time
<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per capita ($)</td>
<td>1072</td>
<td>158</td>
<td>27.538</td>
</tr>
<tr>
<td>Life expectancy (male, years)</td>
<td>58</td>
<td>51</td>
<td>78</td>
</tr>
<tr>
<td>Life expectancy (female, years)</td>
<td>61</td>
<td>56</td>
<td>85</td>
</tr>
<tr>
<td>Per capita exports (dollars, 1962)</td>
<td>340</td>
<td>2</td>
<td>11.291</td>
</tr>
</tbody>
</table>

Sources: WB, Observatory of Economic Complexity, MIT, Own calculations

- Which country will reach the target values for 2016?
  - A?
  - Better conditions
  - B?
Which country will reach the target values for 2016?

- **Venezuela**
  - Better conditions
- **South Korea**

<table>
<thead>
<tr>
<th></th>
<th>Venezuela</th>
<th>South Korea</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GDP per capita ($)</strong></td>
<td>1072</td>
<td>158</td>
<td>27.538</td>
</tr>
<tr>
<td><strong>Life expectancy (male, years)</strong></td>
<td>58</td>
<td>51</td>
<td>78</td>
</tr>
<tr>
<td><strong>Life expectancy (female, years)</strong></td>
<td>61</td>
<td>56</td>
<td>85</td>
</tr>
<tr>
<td><strong>Per capita exports (dollars, 1962)</strong></td>
<td>340</td>
<td>2</td>
<td>11.291</td>
</tr>
</tbody>
</table>

Sources: WB, Observatory of Economic Complexity, MIT, Own calculations
What would Adam Smith have asked?

• What do these countries produce?

• How diverse is what these countries produce?

• What is the “quantity of science” these countries have?
• What is the level of economic complexity of these countries?
  
  • Observatory of Economic Complexity (MIT)
  • Atlas of Economic Complexity (Harvard University)
More colors,
more “quantity of science”
What does Venezuela export? (1962)

TOTAL: $2.77B

Crude Petroleum

Gas Oils

Fuel Oils

5.7% Petroleum Products, Refined

2.5% Light Oils

13% Iron Ore and Concentrates

2.4% Light Oils

5.1%

Source: Observatory of Economic Complexity, MIT
What does South Korea export? (1962)

TOTAL: $54.5M

- Fish
  - Fish: 7.8%
  - Crustaceans and Molluscs: 2.0%
- Milled Rice: 7.1%
- Coal, Lignite and Peat: 6.9%
- Coal: 2.8%
- S310: 4.7%
- Swine: 2.4%
- Iron Ore and Concentrates: 8.8%
- Miscellaneous Non-Ferrous Ores: 6.8%
- Raw Silk: 6.3%
- Unbleached Cotton Woven Fabrics: 2.8%
- Miscellaneous Clay and Refractory: 2.6%
- Quartz: 1.4%
- Salt: 1.1%

Source: Observatory of Economic Complexity, MIT
### Economic complexity

Which country will reach the target values for 2016?

- **Venezuela**
- **South Korea**

More complexity

<table>
<thead>
<tr>
<th></th>
<th>Venezuela</th>
<th>South Korea</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per capita ($)</td>
<td>1072</td>
<td>158</td>
<td>27.538</td>
</tr>
<tr>
<td>Life expectancy (male, years)</td>
<td>58</td>
<td>51</td>
<td>78</td>
</tr>
<tr>
<td>Life expectancy (female, years)</td>
<td>61</td>
<td>56</td>
<td>85</td>
</tr>
<tr>
<td>Per capita exports (dollars, 1962)</td>
<td>340</td>
<td>2</td>
<td>11.291</td>
</tr>
</tbody>
</table>

Sources: WB, Observatory of Economic Complexity, MIT, Own calculations
Differences in policy
Petroleum oils and oils obtained from bituminous minerals, crude.

73%

Source: Observatory of Economic Complexity, MIT
More diversity

Source: Observatory of Economic Complexity, MIT
Fuente: MIT. Observatory of Economic Complexity
• More than half a century

• Millions of migrants

• Systematic reduction of knowledge
  • Industry
  • Research
  • Capacities of the society
Knowledge blackout

• The reason we are meeting today

• The reason many keep leaving the country

• Effects on health conditions
Implications for action

• **Personal level**
  • Increase knowledge

• **Country level:**
  • Changing the trend of knowledge destruction
  • It is possible now
  • In fact, we are doing it now!
Manifestations in health conditions
2000: Fourth highest private expenditure in LA

Source: Global Health Expenditure Database, WHO, Own calculations

Lack of financial protection
2016: Highest private expenditure in LA

Source: Global Health Expenditure Database, WHO, Own calculations

The highest lack of financial protection in LA
Two thirds of the population without health insurance

Extreme poverty

- 60% of children under 3 in risk of undernutrition
- 1,8 million of children
- Knowledge of the future

Source: Encuesta de Condiciones de Vida (ENCOVI), UCV-UCAB-USB
Epidemics

- Measles
- Diphtheria
Malaria

Source: Reports of the Ministry of Health, WHO
Control of high blood pressure

- The disease is not recognized by half of the people who may have it in the older age groups

Source: Encuesta de Condiciones de Vida (ENCOVI), UCV-UCAB-USB, 2016
Coverage of services

- 11.7% of women between 36 and 40 years of age have never had a cervical smear

- 26.7% of women aged 50-55 have never had a mammogram

- 78% of men aged 50-55 have not sought prostate cancer screening services

Source: USB. National Survey of Health and Pensions (ENSAP), 2018
Situation in the 40 largest public hospitals

- 33% of the beds were not operational
- 45% without operating laboratories
- 51.3% without RX services
- 95% without CT and MRI services

Source: Encuesta Nacional de Hospitales ENH, 2018
22,000 doctors have emigrated
• 33% of the total registered with the doctors' association

This includes:
• 6700 pediatricians
• 1400 OB/GYNs
• 2500 surgeons
- A country in high risk

- Deterioration

- The worst performance in LAC
Guidelines for Transformation
Fundamental premise

• From a Knowledge-blackout

• To a Knowledge Society
  • Diversification
  • Value creation
  • Positive Index of Economic Complexity
    • ASAP
    • High technology exports
Requirements

• Political conditions
  • Institutions
  • Rule of Law

• Economic conditions
  • Stability
  • Growth

• Inclusion
Transformation of the Health System
• Fully financed by general revenues

• Universal financial protection
  • Independent from:
    • Employment condition
    • Economic condition
    • Social condition

• Out-pocket-expenditure
  • Moderate: in one year
  • Low: in three years
Organization

- National Health System
  - 60-80% of the population

- Universal coverage of health services

- Inter-governmental decision-making
  - Coordination: Ministry of Health
  - 24 Subnational Health Services
Provision

• Integrated care

• Public and private partnerships
  • Clinics
  • Hospitals
  • NGOs

• Working with
  • Schools and workplaces
  • Mass media
  • Universities and research centers
Actions
Challenge

• Working together to build the best knowledge society as quickly as possible

• Create and communicate knowledge

• Participation in networking
  • Venezuela
  • Abroad
  • Persons
  • Institutions
Now

- Humanitarian support
  - Food, medicines, supplies

- Children in risk of undernutrition

- Networking
  - Local institutions
  - Global

- Knowing the current status
• Knowledge cooperation:
  • Inventory of know how
  • Call center
  • Working with local teams
  • Priorities
  • Learning process
Now

- **Training:**
  - Distance learning
    - A chat may be the difference
  - Short-term
    - One week
    - One month
  - Priorities
    - Health problems
    - Institutions
• Short term research:
  • Oriented to specific problems
  • Management
  • Supporting monitoring at country level
Now

- Identification of institutional options
  - Treatment
  - Diagnosis

- Visualizing the medium term
Medium term

• Humanitarian support

• Knowledge Partnerships
  • Subnational health systems

• Training for innovations

• Creating new services
• Venezuela as global source of innovation
  • Research
  • Networking
  • Knowledge transfer

• Medium-term training

• Technology and innovation

• Quality of services
Guide for action

- Networking
- New skills
- Creation and communication of knowledge
- Training
- Monitoring
Let’s work together to transform the Venezuelan Health System
Thanks!

Marino J. González R.

marinojgonzalez@gmail.com
@marinojgonzalez
http://marinojgonzalez.blogspot.com/