Complexity of the Global Approach to Control Obesity: Challenges for implementation in Mexico

Dr. Simón Barquera,
National Institute of Public Health, Mexico

@sbarquera
Overweight and Obesity trends in Mexico 2000-2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Nacional</th>
<th>Hombres</th>
<th>Mujeres</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>38.3</td>
<td>23.5</td>
<td>35.9</td>
</tr>
<tr>
<td>2006</td>
<td>39.6</td>
<td>30.4</td>
<td>37.5</td>
</tr>
<tr>
<td>2012</td>
<td>38.8</td>
<td>32.4</td>
<td>35.5</td>
</tr>
<tr>
<td>2016</td>
<td>39.2</td>
<td>33.3</td>
<td>37.0</td>
</tr>
</tbody>
</table>

Barquera S et al. Tendencias de obesidad en México 2000-2016
Mortality attributable to DIABETES

9.34%
Latin America: successful initiatives in diverse countries

- **Soda tax**: Mexico, Chile, Ecuador, Peru
- **Front-of-pack warning labels**: Chile, Uruguay, Brazil, Perú
- **School healthy eating guidelines**: Brazil, Colombia
- **Marketing restrictions**: Chile, Brazil, Uruguay
- **Active transportation and physical activity**: Colombia, Brazil, Mexico
Evaluation of soda tax policy in Mexico: sustained reduction in SSBs purchases

- 2014: purchases ↓ 5.5%
- 2015: reductions reached 9.7%
- 2014-2015: average ↓ 7.6%
  - -5.1 Liters/capita/year
Progress in marketing to children regulation in Chile:

Product in Chile:
- Clear, visible labels
- Misleading front of pack labeling system (GDAs)
- GDA- sugar based on 92g a day

Product in México:
- Use of cartoon characters
- Endorsed by sports leagues

Use of cartoon characters is prohibited
Obesity prevention in Latin America

- Challenges
  - Double-burden of malnutrition
  - Inequalities related mostly to SES
  - Interference of industry
  - Scarce resources to invest in obesity prevention
  - Primary health care and first level of attention
Government crusade against hunger: participation of junk-food and soda companies

Funding physical activity programs and services for low-income indigenous children
Vulnerable low-income population in Mexico exposed to misleading marketing and comercial practices
high income super market in Mexico
Low income super market in Mexico

GIFT AND PRICE INCENTIVE:
FREE COKE BUCKET WITH 6 LITERS OF SODA AT $1.3 USD
Proportion of stores with sugar sweetened beverages within children’s reach

Barquera S, et al. Preliminary results based on 720 interviews in five Latin American Countries. (UNICEF)

* Less than 150 cms.
Retail Food Environments in Latin America

High availability of unhealthy foods and marketing to children: points-of-purchase

Targeting children with product placement

- IMAGES
- PRICE DISCOUNTS
- GIFTS
- INCENTIVES
- CARTOON CHARACTERS ON PACKAGES
List of products that interviewees bought at stores without prior planning.

Barquera S, et al. Preliminary results based on 720 interviews in five Latin American Countries. UNICEF

* Less than 150 cms.
Opportunities

- The problem has high political visibility
- LA region well communicated/integrated (domino effect)
- No need of expensive technology
- Solutions can be replicated in low and middle income countries
How can we help consumers make healthier food choices?

CHILE:
WARNING LABEL SYSTEM
- EASY TO UNDERSTAND
- DEVELOPED BY ACADEMIC EXPERTS

MEXICO:
GDA LABEL SYSTEM
- MISLEADING
- DEVELOPED BY FOOD INDUSTRY
How many consumers can interpret the GDA symbols?
How many consumers can interpret the Chilean FOP symbol?

CHILE’S WARNING LABEL IS WELL UNDERSTOOD BY CHILDREN
Evidence showing poor results of the GDA labeling system

- **2010:** Study by INSP: 
  GDA label is not well understood by university nutrition students in Mexico

- **2016:** Study by INSP-UNICEF: 
  Users prefer a warning label over the GDA

- **2017:** ENSANUT 2016: 
  Only 24% of the population reads the GDA and only 13.8% understands it
Understanding of two front-of-pack labeling systems by Mexican population:

**Inequity:** GDAs harder to understand by low income and other vulnerable groups:

- **Lower income less probability of understanding and using GDAs to select healthier choices (p<0.01)**
- **89% would support a warning system as a national regulation**
Mexican Observatory for Obesity: industry interference

OMENT Advisory Council

Lessons learned from policy implementation:

- Obesity prevention policies face major opposition from food industry
- Industry deployed a coordinated response against these efforts

<table>
<thead>
<tr>
<th>Company</th>
<th>Sells Caloric Beverages</th>
<th>Sells Junk Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aflac</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>AlEn</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Campbell</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Conmexico</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Diageo</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Costeña</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Dona bimbo</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>El chaman</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Evacar</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Fomento</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Goya</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Grana</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Heinz</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Herdez</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>L'oreal</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>L'oreal méxico</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Mar submit</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Nestlé</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Olay</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>P&amp;G</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Qualia laboratories</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Ragasa</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Ricello</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Ronny</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Unilever</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Costeña</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
Mexican expert group position on front-of-pack labeling

FOPL based on national & international health recommendations, WHO, PAHO, the National Academy of Medicine, & nutritional recommendations for Mexicans from INCMNSZ

A conflict-of-interest free group with transparency criteria

Coordinated nutrient profile for public policy

A simple, understandable label

Warning label ONLY for harmful ingredients

GDA does not work; an effective system is needed

Salud Pub Mex, 2018:60;4:479-486
Government reductions in expenditure for NCDs in México (2013-2018)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Total health budget (million USD)</th>
<th>NCD Prevention &amp; control (million USD)</th>
<th>% NCD Prevention &amp; control of total health budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>8,600</td>
<td>19.7</td>
<td>0.23</td>
</tr>
<tr>
<td>2013</td>
<td>11,600</td>
<td>25.7</td>
<td>0.22</td>
</tr>
<tr>
<td>2014</td>
<td>11,500</td>
<td>27.5</td>
<td>0.24</td>
</tr>
<tr>
<td>2015</td>
<td>9,600</td>
<td>23.0</td>
<td>0.24</td>
</tr>
<tr>
<td>2016</td>
<td>7,800</td>
<td>20.0</td>
<td>0.26</td>
</tr>
<tr>
<td>2017</td>
<td>6,900</td>
<td>19.1</td>
<td>0.28</td>
</tr>
<tr>
<td>2018</td>
<td>6,500</td>
<td>21.1</td>
<td>0.32</td>
</tr>
</tbody>
</table>

* USD (adjusted for inflation)
Health services and obesity treatment and control in Mexico

- **Budget**: focused in other diseases
- **Health Units**: lack of minimal necessary resources for obesity prevention and control
- **Primary health care physicians**: inadequate training, lack of capacity for proper screening and training
- **Specialists**: insufficient in number and poorly coordinated
- **Users**: Poor adherence to treatment and motivation to change

*Aguilar-Salinas CA, et al. 2016*
Primary health care challenges:

- Obesity prevention and control: critical component to combat the NCDs epidemiologic alert
- Systematization of evaluations and interventions is necessary to achieve efficacy and adherence
- Major adjustments for NCDs financing and organization of health services necessary to control its growth through effective treatment of obesity

Challenges for implementation in Mexico:

- Double-duty policy focused in healthy nutrition and lifestyles across the cycle of life.
- Special focus on vulnerable population: particularly low-SES groups
- Regulations and taxation to improve obesogenic environment
- Industry interference particularly from multinational companies
Thank you!

DR. SIMÓN BARQUERA, MD, MS, PhD.
DIRECTOR

CENTRO DE INVESTIGACIÓN EN NUTRICIÓN Y SALUD,
INSTITUTO NACIONAL DE SALUD PÚBLICA.