PUBLIC HEALTH NUTRITION POLICIES IN MEXICO: LESSONS LEARNED AND ENDURING CHALLENGES

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Mortality attributable to DIABETES:
National epidemiologic NCD alert declared in 2016

9.34%
Double-burden of malnutrition among the 14 most populated countries in the world
Higher relative increase of Acute Myocardial Infarction (AMI) and Diabetes (DM) mortality in less developed regions of Mexico (1980-2002)

Trends in prevalence of malnutrition in children <5y in Mexico:

Steady decrease in undernutrition during the last 30 years

Cuevas L et al, SPM 2018
Higher stunting and obesity in children from the less developed region*

* Children <5y. ENSANUT 2016
The Double-burden of malnutrition is decreasing in Latin America

A recent study estimated Double-burden of malnutrition in 6 countries of Latin America finding a lower than expected risk of concurrent child stunting and maternal overweight.

2. Kroker-Lobos MF et al, AJCN, 100, (6) 2014

In Mexico; at the household level:
- Stunting <5y and Obt/ob in mother: 8.4%
- Individual level
  - (<5y): 1% stunting plus owt
  - Women: 7.6% anemia plus owt

Prevalences lower than expected
... however, the economic costs in Mexico are significant

### Estimated Cost of Double-Burden of Malnutrition in 3 Latin American Countries*

<table>
<thead>
<tr>
<th>Costs</th>
<th>Chile</th>
<th>Ecuador</th>
<th>México</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>385</td>
<td>1,666</td>
<td>7,338</td>
</tr>
<tr>
<td>Education</td>
<td>-</td>
<td>27</td>
<td>151</td>
</tr>
<tr>
<td>Productivity</td>
<td>108</td>
<td>2,651</td>
<td>21,341</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>493</td>
<td>4,344</td>
<td>28,830</td>
</tr>
<tr>
<td>% of GNP</td>
<td>0.20%</td>
<td>4.30%</td>
<td>2.30%</td>
</tr>
</tbody>
</table>

Undernutrition: $407 millions USD - 0.03% GNP

Obesity: $13,157 millions USD - 1.0% GNP

* USD millions
## Government reductions in expenditure for NCDs in Mexico (2012-2018)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Total health budget (billion 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>8.6</td>
<td>19.7</td>
<td>0.23</td>
</tr>
<tr>
<td>2013</td>
<td>11.6</td>
<td>25.7</td>
<td>0.22</td>
</tr>
<tr>
<td>2014</td>
<td>11.5</td>
<td>27.5</td>
<td>0.24</td>
</tr>
<tr>
<td>2015</td>
<td>9.6</td>
<td>23.0</td>
<td>0.24</td>
</tr>
<tr>
<td>2016</td>
<td>7.8</td>
<td>20.0</td>
<td>0.26</td>
</tr>
<tr>
<td>2017</td>
<td>6.9</td>
<td>19.1</td>
<td>0.28</td>
</tr>
<tr>
<td>2018</td>
<td>6.5</td>
<td>21.1</td>
<td>0.32</td>
</tr>
</tbody>
</table>

* USD (adjusted for inflation)
Priority interventions to tackle the double-burden of malnutrition in Mexico:

- Improve access to clean potable water
- Improve breastfeeding practices
- Refine/increase soda and junk-food taxation
- Warning front-of-pack labeling
- Regulation of marketing to children
- Improve the food environment around schools
- Stronger preventive services
TAXING SODA, SAVING LIVES

MEXICO'S SURCHARGE ON SUGARY DRINKS IS THE REAL THING
Evaluation of soda tax policy in Mexico: Sustained reduction in SSBs purchases

- 2014: purchases down 5.5%
- 2015: reductions reached 9.7%
- 2014-2015: average down 7.6%
  - -5.1 Liters/capita/year

Colchero MA, et al. Health Affairs. 2017; 36(3)
Projected impact of the 10% soda-tax in the next 10 years

- ↓ 190,000 diabetes cases
- ↓ 20,000 strokes and AMI
- ↓ 19,000 deaths

Considering only the effect on diabetes, this policy will decrease health expenditures by $983 thousand USD.
Marketing targeted to children affects their preferences and their diet quality

“Children throughout the Americas are subject to pervasive and unrelenting publicity for foods of little or no nutritional value, high in fats, sugars, or salt. Constant advertising of such nutrient-poor, calorie-rich foods in diverse communications media influences children’s food preferences and consumption patterns”

OPS/PAHO, 2011
Marketing directed at children in the food environment
Progress in marketing to children regulation in Chile:

Product in Chile:
- Use of cartoon characters is prohibited ✔
- Clear, visible warning labels ✔
- Misleading front of pack labeling system (GDAs) ❌
- GDA- sugar based on 92g a day ❌

Product in México:
- Use of cartoon characters ❌
- Gifts ❌
- Endorsed by sports leagues ❌
Marketing of unhealthy F&B associated with sports and active transportation
Vulnerable low-income population in Mexico exposed to misleading marketing and commercial practices
School environment: Accessibility of unhealthy food & lack of water fountains
Government actions in the school environment

- Water availability
- Physical activity
- Food marketing inside schools
- Quality of food inside schools
Characterization of food/beverage promotion directed at children

Argentina, Brasil, Chile, Costa Rica, and Mexico*

General Objective:

1) Identify how marketing strategies for food and beverages targeted to children contribute to purchases of unhealthy food

2) Identify how children’s parents may contribute to purchases of unhealthy food

Funded by: Argentina, Brasil, Chile, Costa Rica, and Mexico*

Review

Monitoring the availability of healthy and unhealthy foods and non-alcoholic beverages in community and consumer retail food environments globally

Retail Food Environments in Latin America

High availability of unhealthy food marketing to children at point-of-purchase

Targeting children with product placement

CARTOON CHARACTERS ON PACKAGES

IMAGES

PRICE DISCOUNTS

GIFTS

INCENTIVES
Healthy foods are not as expensive as perceived by consumers...

Mango 1kg - $1.35 USD

Mandarin 2kg - $1 USD
Healthy foods are not as expensive as perceived by the consumers...

4 kilograms of watermelon costs $1.04 USD
GIFTS AND PRICE INCENTIVES:

COKE BUCKET WITH 6 LITERS OF SODA $1.3 USD
high income super market in Mexico
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
Mexican expert group position on front-of-pack labeling

A conflict-of-interest free group with transparency criteria
FOPL based on national & international health recommendations, WHO, PAHO, the National Academy of Medicine, & nutritional recommendations for Mexicans from INCMNSZ.

A simple, understandable warming label
Consistent nutrient profile for public policy

GDA does not work; an effective system is needed
FOP label ONLY for harmful ingredients

Salud Pub Mex, 2018:60;4:479-486
Mexico, like other countries in Latin America, has a relatively low prevalence of the double burden of malnutrition.

However, being one of the most populated countries in the world, this condition generates an enormous burden.

The solution is complex but there is consensus on the need of triple-duty policies helpful to tackle obesity, undernutrition and climate change such as:

- Water sanitation
- Breast-feeding promotion
- Soda and junk food taxation
- Front of pack labeling
- Marketing regulation
- Healthy school regulations
- Active transportation
Thank you!

Colaborators:
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