Health in Mexico: a personal perspective
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1. The greatness of Mexico and its problems today and always
2. The importance of health and its evolution
3. The Health System in Mexico
4. Health, Covid-19 and other current problems
5. Final words
1. THE GREATNESS OF MEXICO AND ITS PROBLEMS TODAY AND ALWAYS
Mexico is a great nation!
Great and with greatness!
Mexico is great

Due to:

- It has a capital demography (11th in the world)
- It has an enviable geographic extent and location (14)
- Robust economy (15)
- Biodiversity and natural capital (top ten)
- Tourism, exportation, coasts (first 15)
The greatness of Mexico

It has to do with our history, with national feats, with the pride of being and belonging:

• Millennial culture: literature, music, visual arts, poetry, philosophy, humanities, astronomy, chemistry, medicine, ecology, among others.
• Similarly, popular culture: gastronomy, celebrations, ceremonies.
• Development of Institutions.
• Identity, symbols.
• World-class characters.
... And yet Mexico has secular problems

- Poverty and inequality
- Few years of education
- Violence and insecurity
- Detachment from the rule of law
- Health gaps
- Exclusion of important groups

Many of these problems have worsened in recent years, but this is not the forum to discuss them.
Poverty and inequality

• Poverty and inequality are historical and serious problems in Mexico. For inequality, it ranks 138 out of 157 nations.

• They are not problems inherited from the 20th century, or from Independence or even from the Viceroyalty of New Spain.

• We are part of the most unequal region on the planet.
2. THE IMPORTANCE OF HEALTH AND ITS EVOLUTION
The importance of health

It is about:

- An essential **human right** and element of **national security**
- An indispensable **social equalizer** and a key factor of the **unity of society**
- A component of **individual and collective development**, and a fundamental element of **inclusion and stability**
- A trigger for **economic growth and productivity**, therefore representing a **social investment with valuable returns**

The pandemic has forced us to reassess the importance of health

**Health** is not everything, but **without it there is almost nothing**
Health through the years

We are living an **epidemiological transition and another demographic** one, both of which reflect achievements but entail challenges that we must face.

- The **demographic transition** forces us to take advantage of the **demographic dividend** and **promote healthy aging**. In 2020, a total of 15.0 million people aged 60 years and over (11.9% of the total) was estimated, while it is roughly calculated that in 2050 the figure will rise to about 32.4 million (21.5% of the total).

- Regarding the epidemiological transition, it should be remembered that between 1980 and 2019, infectious diseases decreased, giving way to non-communicable diseases.
Health through the years

In Mexico for the last 50 years:

• Life expectancy at birth increased by almost 15 years

• The structure of general mortality changed radically

• Infant mortality decreased by almost 85 percent

• Most of the health infrastructure was developed in these years
Health through the years

Epidemiological transition

• Between 1980 and 2019, infectious diseases decreased, giving way to non-communicable diseases.

• 85 percent decrease in mortality from infectious and parasitic diseases.

• 34 percent increase in mortality from cardiovascular diseases; 71 percent in the rate of malignant tumors; and 296 percent in the death rate from diabetes.
# Health through the years

<table>
<thead>
<tr>
<th>1980</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infectious diseases</strong></td>
<td><strong>Non-communicable diseases</strong></td>
</tr>
<tr>
<td>1. Infectious and parasitic diseases</td>
<td>1. Cardiovascular diseases</td>
</tr>
<tr>
<td>2. Pneumonia and influenza</td>
<td>2. Diabetes mellitus</td>
</tr>
<tr>
<td>3. Heart disease</td>
<td>3. Cancer</td>
</tr>
<tr>
<td>13.7%</td>
<td>21%</td>
</tr>
<tr>
<td>8.8%</td>
<td>14%</td>
</tr>
<tr>
<td>8.1%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Short, sudden and fast-resolving illnesses

Long-term illnesses in which control is often the optimal response.

This has impacted the cost of healthcare significantly

*Source: INEGI*
3. THE HEALTH SYSTEM IN MEXICO
Mexico a nation of institutions

• A hospital (that of Jesus) with 497 years of existence.
• A University (UNAM) founded 470 years ago.
• The oldest financial institution in Latin America (Nacional Monte de Piedad) with 246 years of existence.
• Hospital Civil de Guadalajara with 227 years of operation.
• Collegiate health authority (General Health Council) with 180 years.
• Social security system (78 years).
Health institutions

The Health System in Mexico consists of two sectors: public and private. The *public sector* includes the Social Security institutions: IMSS, ISSSTE, PEMEX, SEDENA, SEMAR, as well as the institutions and programs that serve the population without social security: Ministry of Health, State Health Services, IMSS-Bienestar (Wellbeing) program. The *private sector* includes insurers and service providers who work in private medical offices, clinics and hospitals.
Characteristics of the Health System

• The health system in Mexico is:
  • By administrative management: with partial decentralization, tendency to re-centralization and dependent on employment status
  • Due to its coverage: partial, with duplications and marked deficiencies
  • By the source of financing: mixed, public and private
  • Due to the distribution of resources: inequitable and inertial
Characteristics of the Health System

• Due to the technical organization of the services: scarcely articulated and of free demand

• For its quality: heterogeneous

• By the type of services: with an emphasis on personal and curative services

• By the level of intervention of providers and users: barely participatory
The diversity of public institutions generates inefficiencies in the system:

- Excess personnel in some areas while others are understaffed
- Higher costs
- Bureaucratic procedures
- Absence of information crossings between the beneficiaries' databases
- Low portability between systems
- Inequality in the quality of services
Inefficiencies are accompanied by:

• Lack of coverage
• Fragmentation and duplication
• Healing approach
• Misdirected spending
Health Resources of public institutions - Mexico 2018

- Number of medical units: 24,000
- Hospital beds 90,000
- Number of physicians: 234,000
- Number of nurses: 325,000
## Health resources for the population

### Mexico 1980 - 2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of units</th>
<th>Hospital beds</th>
<th>Number of physicians</th>
<th>Number of nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>7,983</td>
<td>47,602</td>
<td>54,648</td>
<td>78,525</td>
</tr>
<tr>
<td>2018</td>
<td>23,848</td>
<td>90,159</td>
<td>234,591</td>
<td>324,887</td>
</tr>
</tbody>
</table>
A typical day in public health institutions

- More than a million daily medical care services
- About 4.3 thousand births
- Almost a million consultations
- Almost 100,000 emergencies
- Ten thousand surgeries
- More than 16 thousand hospitalizations

Fuente: DGIS, SSA., 2018
## Comparative statistics on health status and risk factors

<table>
<thead>
<tr>
<th></th>
<th>México</th>
<th>USA</th>
<th>OECD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (millions, 2019)</td>
<td>124.9</td>
<td>328.0</td>
<td></td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>75.4</td>
<td>78.6</td>
<td>81.0</td>
</tr>
<tr>
<td>Infant mortality 2017 (per 1,000 live births)</td>
<td>12.1</td>
<td>4.8</td>
<td>3.5</td>
</tr>
<tr>
<td>Overweight and obesity (% of the adult population)</td>
<td>72.5</td>
<td>71.0</td>
<td>58.2</td>
</tr>
<tr>
<td>Overweight and obesity (% of children ages five to nine)</td>
<td>37.5</td>
<td>43.0</td>
<td>31.4</td>
</tr>
<tr>
<td>Diabetes (type I and II among adults)</td>
<td>13.1</td>
<td>10.8</td>
<td>6.4</td>
</tr>
<tr>
<td>Top three causes of death</td>
<td>Coronary heart disease • Diabetes • Cancer</td>
<td>Coronary heart disease • Lung cancer • Chronic obstructive pulmonary disease</td>
<td>Coronary heart disease • Alzheimer’s and other dementias • Stroke</td>
</tr>
<tr>
<td>Main three risk factors in health</td>
<td>High fasting plasma glucose • High BMI • High blood pressure</td>
<td>Tobacco • High blood pressure • High pasting plasma glucose</td>
<td></td>
</tr>
</tbody>
</table>

Source: Institute of Global Health Sciences. UCSF
# Comparative performance of health systems

<table>
<thead>
<tr>
<th>Metric</th>
<th>México</th>
<th>USA</th>
<th>OECD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health expenditure per person (in PP dollars, 2018)</td>
<td>1,138</td>
<td>10,586</td>
<td>3,994</td>
</tr>
<tr>
<td>Health expenditure (percentage of GDP)</td>
<td>5.5</td>
<td>16.9</td>
<td>8.8</td>
</tr>
<tr>
<td>Out-of-pocket expenses (percentage of household consumption)</td>
<td>3.6</td>
<td>2.8</td>
<td>3.3</td>
</tr>
<tr>
<td>% of households with catastrophic health expenditures</td>
<td>5.5</td>
<td>7.4</td>
<td>5.8</td>
</tr>
<tr>
<td>Hospital beds (per 1,000, population 2018)</td>
<td>1.4</td>
<td>2.8</td>
<td>4.7</td>
</tr>
<tr>
<td>Physicians (per 1,000) population)</td>
<td>2.4</td>
<td>2.6</td>
<td>3.5</td>
</tr>
<tr>
<td>Nurses (per 1,000 population)</td>
<td>2.9</td>
<td>11.7</td>
<td>8.8</td>
</tr>
</tbody>
</table>

Source: Institute of Global Health Sciences. UCSF
Some problems of public health institutions in Mexico

- Insufficient funding
- Predominance of hospital and curative care
- Deficit of preventive programs for non-communicable diseases
- Poor management
Some recent mistakes

- Disappearance of the Seguro Popular without the required preparation
- Budget cuts
- Increased medicine shortage
- New centralization of attributions
- Weakening of preventive programs
The health of the institutions

• We have a public system with deficiencies and imperfections, but capable of providing answers, which has gradually improved and can be overcome.

• It has been built with many efforts and with the work of many generations.

• The response to the pandemic could have been better with a clearer strategy and greater foresight.
Conclusions

• Substantially increase public investment for health

• Reform the system

• Organize a real National Health Service

• Single, public and decentralized service with universal coverage, which favors preventive care, primary care and general hospitalization, in a staggered manner.
4. HEALTH, COVID-19 AND OTHER CURRENT PROBLEMS
Some health problems in Mexico

• Obesity, overweight and non-communicable diseases
• Double burden of disease at some areas
• Mental health and addictions
• Pregnancy in children and adolescents
• Geriatric care
• Lack of service coverage
Health and Covid-19

Health has deteriorated in the last two years, exacerbated by Covid-19, among other reasons for:

• Disappearance of Seguro Popular without the required preparation
• Shortage of essential supplies
• Decreased vaccination
• And of course, due to the mismanagement of the pandemic:
  o First place in deaths by Covid-19 of health workers; second place in lethality; third in number of deaths; worst management among the top 53 economies (Bloomberg), and ranking 97th out of 98 nations (Lowy Institute). Institute for Global Health Sciences, UCSF
The Covid-19 pandemic in Mexico

- At least three official data sources to know the dimension.
- The number of infections can be between 2.3 and 42.2 million cases.
- The official death toll varies between 212 and 330 thousand.
- Between January and August 2020, INEGI reported that the number of deaths from Covid-19 increased to 108,658, a figure that contrasts with the 64,414 reported on August 31, that is, 69% more.
- In the ten age groups considered by INEGI, Covid-19 was among the top ten causes of death and amid the 35-44, 45-54 and 55-64 age groups it was the leading cause.
The Covid-19 pandemic in Mexico

• Excess deaths had a different behavior according to causes. For example, of the top ten, there are three that have significant growth:
  • Influenza and pneumonia \( \uparrow \) 44%
  • Heart disease \( \uparrow \) 38.6%
  • Diabetes \( \uparrow \) 35.6%

• Similarly, there are three that decreased:
  • Accidents \( \downarrow \) 19.9%
  • Chronic obstructive pulmonary disease \( \downarrow \) 8.0%
  • Homicides \( \downarrow \) 6.5%
Arguments to support that there has not been a good management

- Mexico failed in its response to the pandemic relative to comparable countries.
- Under-registration of cases and deaths.
- High prevalence in chronic diseases.
- 50.6% of deaths were registered in those under 65, compared with 18.7% in the United States.
- With an average performance, 190 thousand deaths from all causes would have been prevented.

Source: Mexico's Response to Covid-19: A Case Study. Institute for Global Health Sciences, UCSF
Arguments to support that there has not been a good management

- Mexico City has contributed disproportionately to mortality.
- About 58.5 percent of out-of-hospital deaths
- Great inequalities in access to tests and healthcare
- High percentage of deaths in hospitalized patients
- High number of deaths among health personnel
- High case-fatality ratio (four times the world number)

Source: Mexico’s Response to Covid-19: A Case Study. Institute for Global Health Sciences, UCSF
Other current problems

- Social polarization and risk of social fracture
- Weakening of democracy and the regime of institutions
- Breakdown of politics and distrust of politicians
- Risk of authoritarianism
- Collective "anesthesia" and fear in many groups and sectors (Dr. Julio Frenk)
5. Final words