Examining geographical differences in the HIV care cascade among men who have sex with men in Mexico

Presenter: Angel B Algarin PhD, MPH

Co-authors: Marisol Valenzuela Lara MD, MPH, Johanna Chapin-Bardales PhD, MPH, Ricardo Baruch-Domínguez PhD, MPH, Mauricio Hernandez-Avila MD, PhD, MPH, Laramie R Smith PhD
Introduction

In 2018, there were an estimated 230,000 people living with HIV (PLWH) in Mexico

- 79% know their status
- 72% are on ART
- 55% are virally suppressed

In an effort to reach the UNAIDS 90/90/90 goal, it remains important to examine barriers to its achievement.

Examining regional differences can shed light on intervention planning tailored to regional, historical, social, and economic contexts.

(De La Torre, 2019)
Introduction

To describe regional differences in the HIV care cascade among MSM in Mexico

AIM

To describe regional differences in the HIV care cascade among MSM in Mexico
Methods

Eligibility
- Cisgender male
- 18+ years of age
- History of anal/oral sex with another man
- Mexican Residence

Recruitment
- Online through Social Networking applications:
  - Grindr
  - Facebook
  - Etc.

Data
*Es entre Hombres Study*
Self-reported data from N=15,889 MSM

Similar study design to the American men’s Internet Survey

Timeline
- May-June 2017

Zlotorzynska (2020)
Based on the self reported state of residence, participants were stratified into the following 6 regions:

1) Noroeste
   • Tijuana, Ciudad Juarez, Chihuahua
2) Noreste
   • Monterrey, Nuevo Laredo
3) CDMX/EdoMex
   • Toluca
4) Centro
   • Puerto Vallarta, Colima, Guadalajara
5) Bajio/Occidente
   • Puebla, Tlaxcala, Veracruz
6) Sur/Sureste
   • Oaxaca, Cancun, Campeche

(Baruch, in progress)
HIV Care Cascade and related variables

HIV negative
- History of HIV testing
- HIV testing in past year

PLWH
- HIV counseling at diagnosis
- Linkage to care <1 month
- Lab results <1 month
- Accessed ART <1 month
- Currently on ART
Analysis

Descriptive statistics
Chi Squared tests
Alpha=0.05

Geographical depictions of regional differences in the HIV care cascade and related variables
Demographics

- **65.7%**
  - 18-29 years

- **15,889**
  - Total Participants

- **64.8%**
  - ≥ Technical/Bachelors
Regional Stratification

1) Noroeste
   n=1,630
   N=14,261,736

2) Noreste
   n=1,662
   N=14,746,589

3) CDMX/EdoMex
   n=5,428
   N=24,026,942

4) Centro
   n=2,394
   N=21,936,558

5) Bajio/Occidente
   n=2,900
   N=22,423,972

6) Sur/Sureste
   n=1,875
   N=14,940,741
Results HIV Neg/Unk.

- HIV Negative/Unknown (N=13,597)***
- Ever tested for HIV (N=8,827)***
- Tested in the past 12 months (N=5,617)***

*p<0.05, **p<0.01, ***p<0.001
## Results HIV Neg/Unk.

<table>
<thead>
<tr>
<th></th>
<th>Noroeste</th>
<th>Noreste</th>
<th>CDMX</th>
<th>Centro</th>
<th>Bajio</th>
<th>Sur</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HIV neg/unk.</strong></td>
<td>906 (58.3)</td>
<td>935 (58.6)</td>
<td>3,101 (59.5)</td>
<td>1,250 (54.6)</td>
<td>1,607 (57.6)</td>
<td>1,028 (56.9)</td>
</tr>
<tr>
<td><strong>Ever HIV Test</strong></td>
<td>906 (63.4)</td>
<td>935 (63.4)</td>
<td>3,101 (68.6)</td>
<td>1,250 (62.2)</td>
<td>1,607 (62.8)</td>
<td>1,028 (64.3)</td>
</tr>
<tr>
<td><strong>HIV Test 12m</strong></td>
<td>546 (39.9)</td>
<td>587 (41.6)</td>
<td>2,054 (47.3)</td>
<td>765 (39.6)</td>
<td>992 (40.3)</td>
<td>673 (43.9)</td>
</tr>
</tbody>
</table>
Results HIV Positive

- HIV Positive (N=1,650)***
- HIV counseling at diagnosis (N=1,226)
- Linkage to care <1 month (N=913)
- Lab results <1 month (N=618)***
- Accessed ART <1 month (N=561)*
- Currently on ART (N=1,299)**

*p<0.05, **p<0.01, ***p<0.001
## Results HIV Positive

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</tr>
</thead>
<tbody>
<tr>
<td><strong>HIV Positive</strong></td>
<td>124 (8.0)</td>
<td>123 (7.7)</td>
<td>686 (13.2)</td>
<td>279 (12.2)</td>
<td>230 (8.2)</td>
<td>208 (11.5)</td>
</tr>
<tr>
<td><strong>Received Labs</strong></td>
<td>36 (33.0)</td>
<td>32 (29.4)</td>
<td>331 (53.9)</td>
<td>84 (35.3)</td>
<td>78 (37.1)</td>
<td>57 (31.8)</td>
</tr>
<tr>
<td><strong>Accesed ART</strong></td>
<td>40 (36.0)</td>
<td>57 (52.3)</td>
<td>222 (35.8)</td>
<td>83 (34.9)</td>
<td>83 (39.7)</td>
<td>76 (42.0)</td>
</tr>
<tr>
<td><strong>Current ART</strong></td>
<td>95 (84.8)</td>
<td>97 (88.2)</td>
<td>571 (91.2)</td>
<td>196 (81.7)</td>
<td>182 (86.3)</td>
<td>158 (86.8)</td>
</tr>
</tbody>
</table>
Discussion

This is the first study to examine regional difference is in the HIV care cascade among MSM in Mexico

90/90/90

Not yet close
• 31.3% have unknown HIV status
• 87.7% are currently on ART

HIV negative

Despite testing recommendations,
• 43.1% of HIV neg/unk received test in 12m
  • Low Centro (39.6%)
  • High CDMX/EdoMex (47.3%)
Lower resources, increased stigma, and accessibility issue could be driving regional disparities

HIV Labs 1m receipt
• Overall 42.4%
  • Low Noreste (29.4%)
  • High CDMX/EdoMex (53.9%)

Fragmented health system, lab processing protocols, lower resources
Resources for HIV should be distributed in a more targeted way.

Similar NHBS/AMIS

Allows for researchers to identify trends.

Continued Surveillance

Resources for HIV should be distributed in a more targeted way.

Resource Distribution

Policies surrounding lab processing, health system communication, clinic accessibility, and stigma are necessary.

Policy
Thanks

Do you have any questions?
Angel B Algarin
T32 Postdoctoral Fellow UCSD
aalgarin@health.ucsd.edu

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