

# An Analysis of Distance as a Barrier to HIV Treatment in Oaxaca, Mexico

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# 1. Introduction

- In 2005, 47% of Oaxaca lacked sufficient income to pay for food, as well as the expenses related to health and education<sup>1</sup>.
- Three mountain ranges inhibit efficient transportation throughout the state.
- Oaxaca has the 12<sup>th</sup> highest prevalence of HIV in Mexico<sup>1</sup>.
- There exists only one center for HIV treatment, within the government-funded healthcare program *Seguro Popular*.
- In 2010, 43% of the population depended on *Seguro Popular* for health insurance<sup>1</sup>.
- An HIV advocacy group named Amemos
  Vihvir (Spanish for "We Love to Live") is in
  the process of obtaining funding for a house
  in which patients could sleep to make the
  trip less arduous.
- A new clinic is slated to be constructed in the district of Tehuantepec.

# Figure 1

#### **Average Hours Traveled by District**

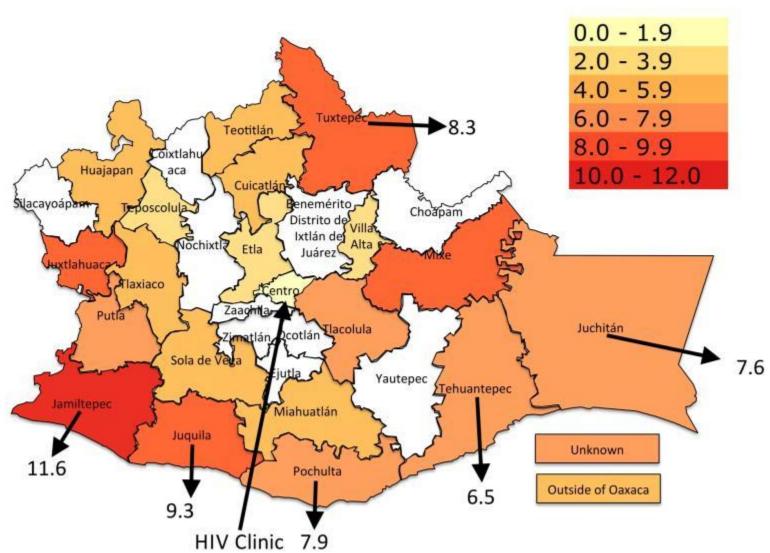


Figure 1: This map of Oaxaca represents the average travel times of participants to the HIV clinic. Note that delays in public transportation, roadblocks, landslides, and flooding frequently and dramatically increased travel times.

#### 2. Purpose

#### Problem

• Patients travel for many arduous hours on a monthly basis to receive HIV treatment.

#### Research Questions:

- In what ways does the physical distance between users and the clinic obstruct their access to care?
- What solutions will most appropriately address the needs of the patients who face these obstacles?

# Figure 2

# Percentage of Participants Affected by Each Obstacle

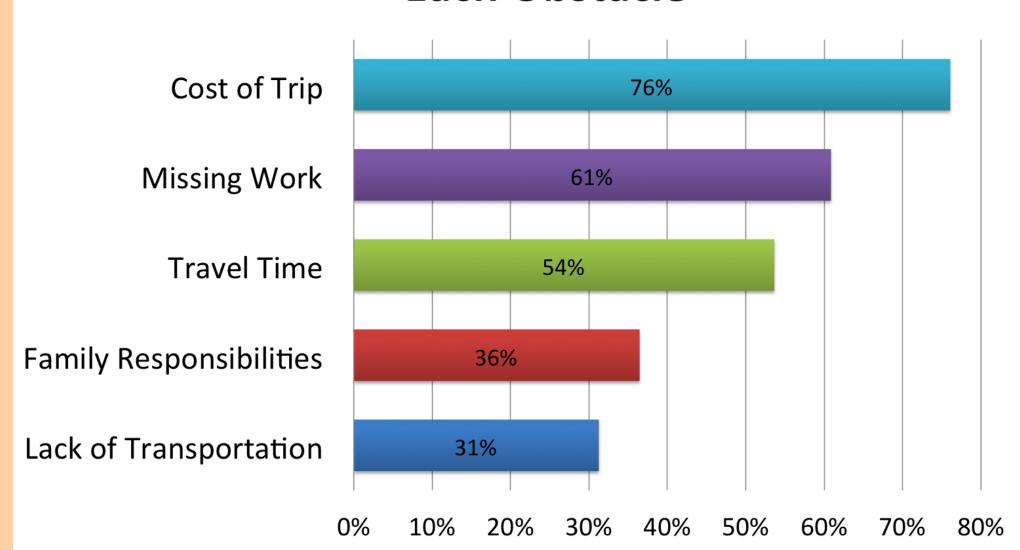


Figure 2: This bar graph represents the frequency of which each obstacle was reported. Not included in this graph are issues of stigma that often complicated one's ability to get to the clinic.

# 3. Methods

#### Preliminary research:

- Volunteered with the HIV advocacy group Amemos Vihvir during the summer of 2011.
- Interviewed and spoke with individuals from HIV advocacy groups in Juchitán, a city located 6 hours from the CAPASITS clinic.

#### Questionnaire:

- Included demographic questions, details about travel to the clinic, obstacles faced in getting to the clinic, and potential solutions.
- In an interview format, the patients answered the questions in the waiting room.
- I asked patients who reported travelling for many hours to complete the questionnaire.

#### Analysis:

- Calculated the demographic distribution of the sample
- Analyzed the distribution of obstacles faced by percentage and district
- Considered potential solutions by amount of support and different measures of need

# Acknowledgements

#### Funding from

- Anthropology Department
- SAS Honors Department

#### Supported by:

- Professor Guarnaccia
- Professor Magaña
- Amemos Vihvir
- COESIDA/CAPASITS Staff
- Questionnaire and Interview Participants

# 4. Results

#### Travel Cost: Figure 3

• Although services at the clinic were free, patients spend 118% of their weekly salary on average in travel costs. The vast majority of patients come to the clinic every 1 or 2 months to obtain their antiretroviral medication.

#### Missing Work

 In addition to losing one or two days of pay, stigma against people living with HIV causes the vast majority of people to lie to their bosses.

#### Travel Time: Figure 1

- For people living outside of the District of Centro, the average travel time was 7.8 hours.
- The unpredictability of weather and protestrelated roadblocks increase the difficulty in arriving to appointments on time.

#### Potential Solution 1: House

- 68% of participants said a house would make going to the clinic easier
- Those who reported that it would not be helpful cited inability to miss work or family responsibilities.

#### Potential Solution 2: A closer clinic

- 90% of participants reported that they would attend a clinic closer to where they live.
- The most commonly cited reason for not attending a closer clinic was fear of discrimination if they saw someone they knew.

# Figure 3

#### Percentage of Weekly Salary Spent to Travel to Clinic

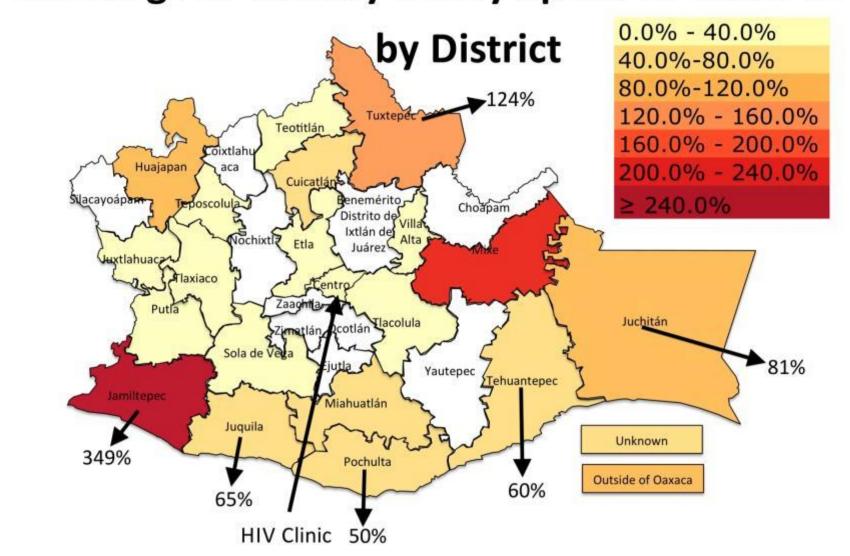
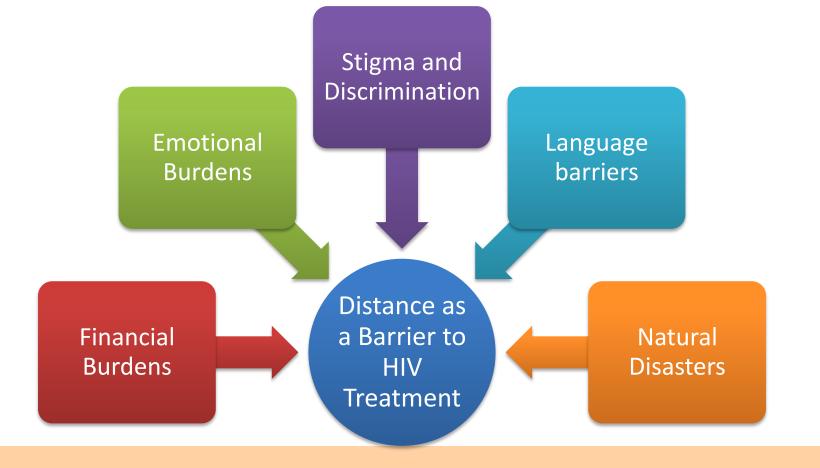


Figure 3: This map of Oaxaca represents the average percentage of weekly salary spent on travel costs by participants from different districts. A comparison with Figure 1 reveals that the district of Jamiltepec has the highest travel time and the highest average percentage of weekly salary spent on travel costs.

#### 5. Discussion

- Informed by the research of James Young and Matthew Gutmann, this project sought to understand the many factors that influence medical decisions and to employ this information as the foundation for future projects<sup>2</sup> <sup>3</sup>.
- As with Young and Gutmann, I found that assumptions by policy-makers hindered public health initiatives<sup>2 3</sup>.
- Given my findings that the travel costs were the most widely reported obstacle to care, I propose that efforts should be focused on reducing costs for those in greatest need.
- Building off the writing of Susan Sontag, I found that the meaning of living with HIV diverges dramatically from the biomedical definition<sup>4</sup>.
- For many, the symptoms of HIV were financial and emotional burdens.
- For some, HIV represented an opportunity for change or an opportunity to help others.
- Unlike Sontag, I do not argue against the use of metaphors to understand illness, but rather consider them highly valuable tool in understanding what HIV means to people.



# 6. Questions for Future Research

- Is the health of patients correlated with any of these obstacles?
- Is there a significant number of individuals living with HIV who choose not to seek care due to these obstacles?

#### References

<sup>1</sup>INEGI. (2010). Anuario estadistico Oaxaca (2010th ed.) INEGI. <sup>2</sup>Young, James Clay and Linda C. Garro. Medical Choice in a Mexican Village. Long Grove, IL: Waveland Press, 1993. Print. <sup>3</sup>Gutmann, Matthew. *Fixing Men: Sex, Birth Control, and AIDS in Mexico*. California: University of California Press, 2007. Print. <sup>4</sup>Sontag, Susan. 1989. Illness as a Metaphor and AIDS and its Metaphors. New York: Anchor. Print.