



United States-Mexico Border Health: Challenges and Opportunities

Leonard Suniga, Phillip Haire and Abid Hussaini

Department of Family Medicine and Public Health, University of California San Diego (UCSD)



Background

- There are currently 11 million people residing along the U.S.-Mexico border.
- The U.S. border is among the poorest areas in the United States with about less than 30% of families are living at or below the poverty level.
- Border residents living with chronic diseases are more likely to be unaware of their status.
- Obesity prevalence among the U.S. border population was higher than among the Mexican border population (57.5% vs. 45.5%)

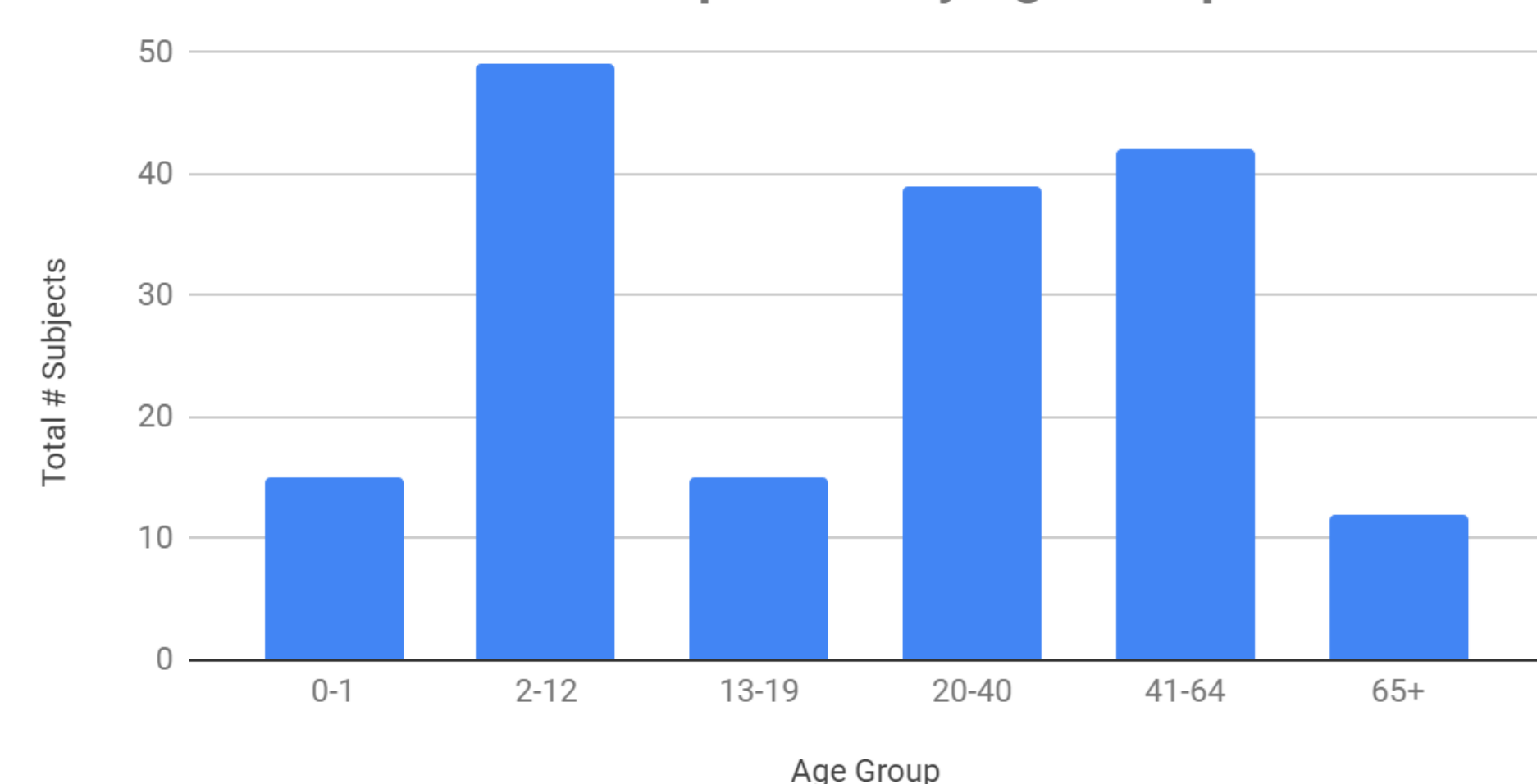
Objective

The purpose of our study is to determine body mass index (BMI) distribution among the residents of Tijuana, Mexico, and to assess the distribution of comorbidities that comes with having certain BMI status.

Study Design/Subjects

- A cross-sectional design was used for our study.
- The International Health Collective (IHC) is a clinic run by students from UCSD that serves the communities in Tijuana, Mexico.
- We acquired data from 173 subjects who sought medical treatment from IHC between October 2018 to April 2019 (56 Males and 117 Females).
- The study subjects were randomly chosen, utilizing only their gender, age, BMI status, and diagnoses.

Figure 3: Disease Distribution Among Residents of Tijuana, Mexico from Oct. 2018 to Apr. 2019 by Age Group



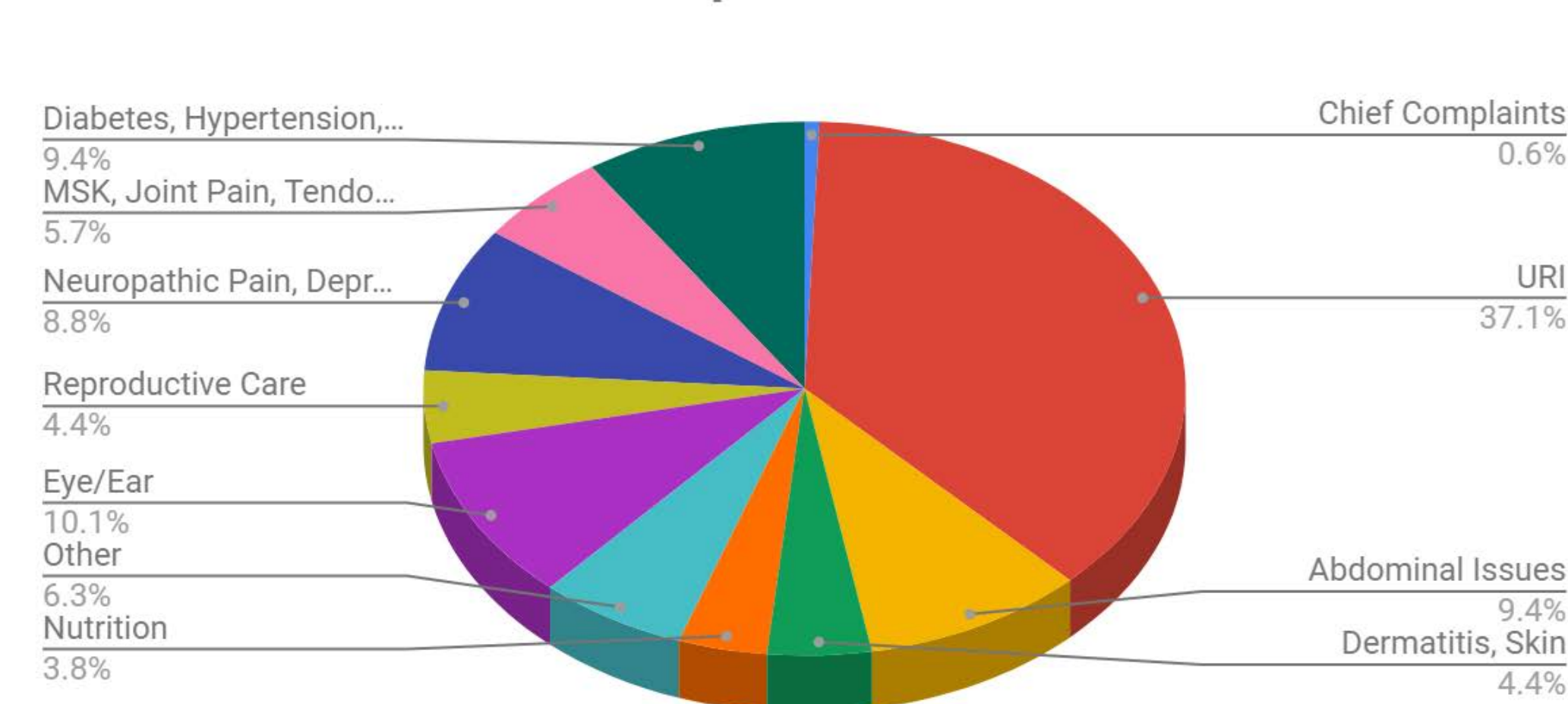
Operational Definitions

- BMI status was determined via calculated BMI based on subject's recorded height and weight categorized into 5 levels:
 - 18.5% and under = Underweight
 - 18.5% - 24.9% = Healthy
 - 25.0% - 29.9% = Overweight
 - 30.0% + = Obese
 - 40.0% = Class 3 Obese
- Health status was determined according to subject's recorded diagnoses.

Results

- Many IHC patients reported nutrition and physical activity as their major health concerns, and are the main two behaviors affecting most of the adult population.
- BMI status distribution is as follow:
 - 2.3% (4) = Underweight
 - 36.0% (62) = Healthy
 - 21.5% (37) = Overweight
 - 27.9% (48) = Obese
 - 2.3% (4) = Class 3 Obese
- Subjects who measured a BMI greater than 25.0% were diagnosed with upper respiratory and nutritional issues. Fifteen (9.4%) of these subjects were diagnosed with diabetes and hypertension.

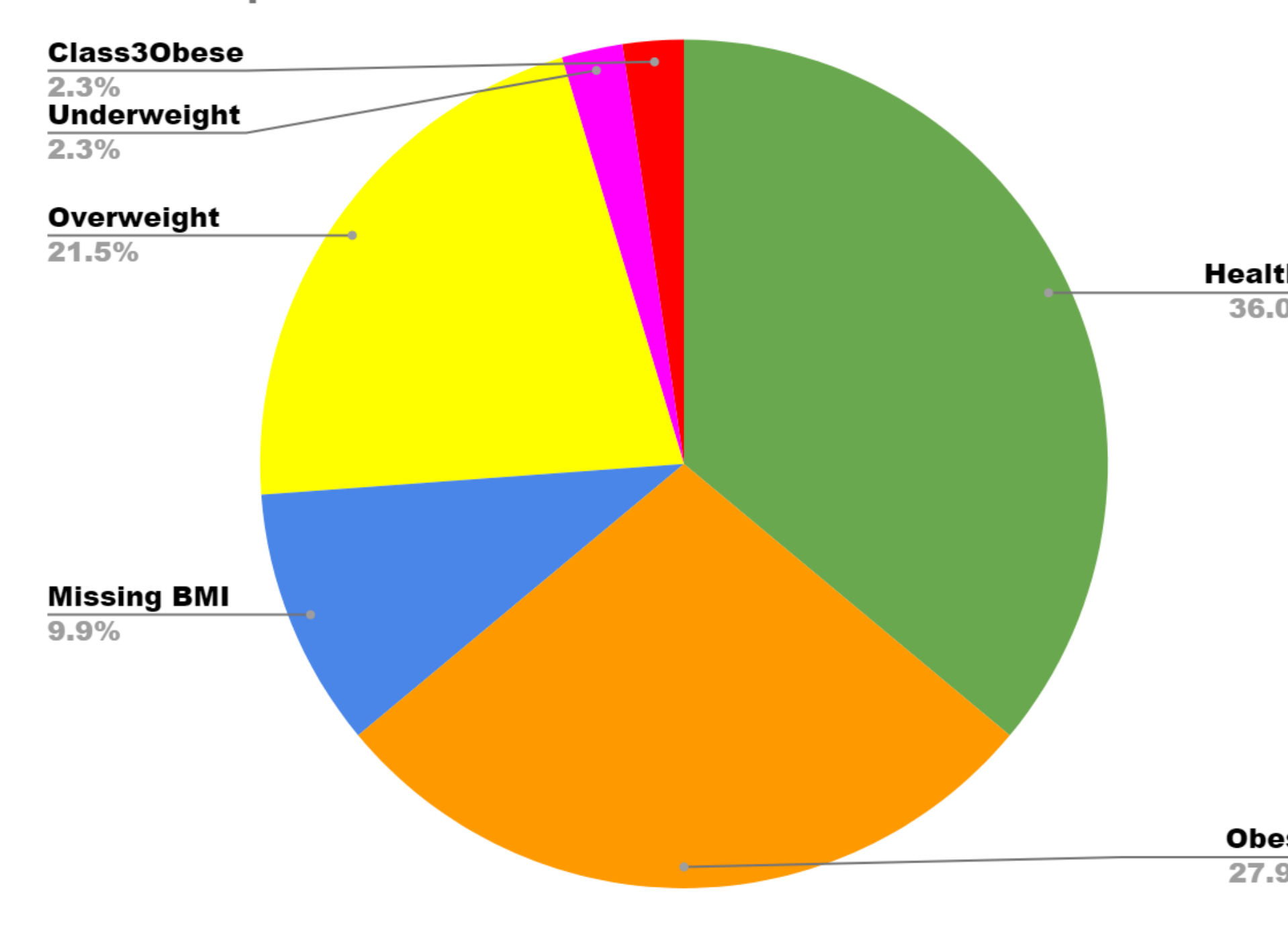
Figure 2: Disease Distribution Among Residents of Tijuana Mexico from Oct. 2018 to April 2019



Policy Implications

- Instilling affordable healthcare options at the US - Mexico border. This option grants healthcare to immigrants who are crossing the border by having their employer cover costs for workers and their families.
- Foundation initiatives to fund binational health activities. This policy takes funds from foundations and allocates them toward binational health insurance.
- Invest in prevention and health promotion to address the high prevalence of high BMI in vulnerable populations. This policy would spread information about the issue through a series of programs.

Figure 1: BMI Status of Tijuana, Mexico Residents from Oct. 2018 to Apr. 2019



Conclusion

- As subjects age, their BMI status increases.
- Addressing nutritional needs and physical activity can greatly improve the health of the residents of Tijuana.
- Access to an affordable healthcare system would also benefit the vulnerable populations of Tijuana by offering low-cost insurance policies.

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