Measuring the Prevalence of Disabilities Among Unhoused People Who Use Drugs in Tijuana, Mexico



Authors: Alhelí Calderón-Villarreal, MD, PhD, MPH^{1,2}, Joseph R. Friedman, MD, PhD, MPH³, Brendan Terry⁴, Stephanie Elizabeth Medina Ponce, MS⁵, Ruben Alejandro González-García⁶, Mrinalini Mishra⁷, Lilia Pacheco Bufanda, MCN⁸, Sara Alejandra González Olachea⁹, Rebeca Cázares-Adame, MD, MPH¹⁰, Naibe Reynoso⁷, Ietza Bojorquez, MD, PhD⁹

- 1 California State University, San Marcos (CSUSM), San Marcos, California, US
- 2 Asociación Bajacaliforniana de Salud Pública Capítulo Tijuana (ABCSPAC), Tijuana, Baja California, Mexico
- 3 University of California, San Diego (UCSD), San Diego, California, US
- 4 Babraham Institute, Cambridge, UK
- 5 Independent researcher, Tijuana, Baja California, Mexico

- 6 Autonomous University of Baja California (UABC), Tijuana, Baja California, Mexico
- 7 University of California, Los Angeles (UCLA), Los Angeles, California, US
- 9 The Northern Bordern Collage (El COLEF), Tijuana, Baja California, Mexico

10 University of San Diego (USD), San Diego, California, US

BACKGROUND

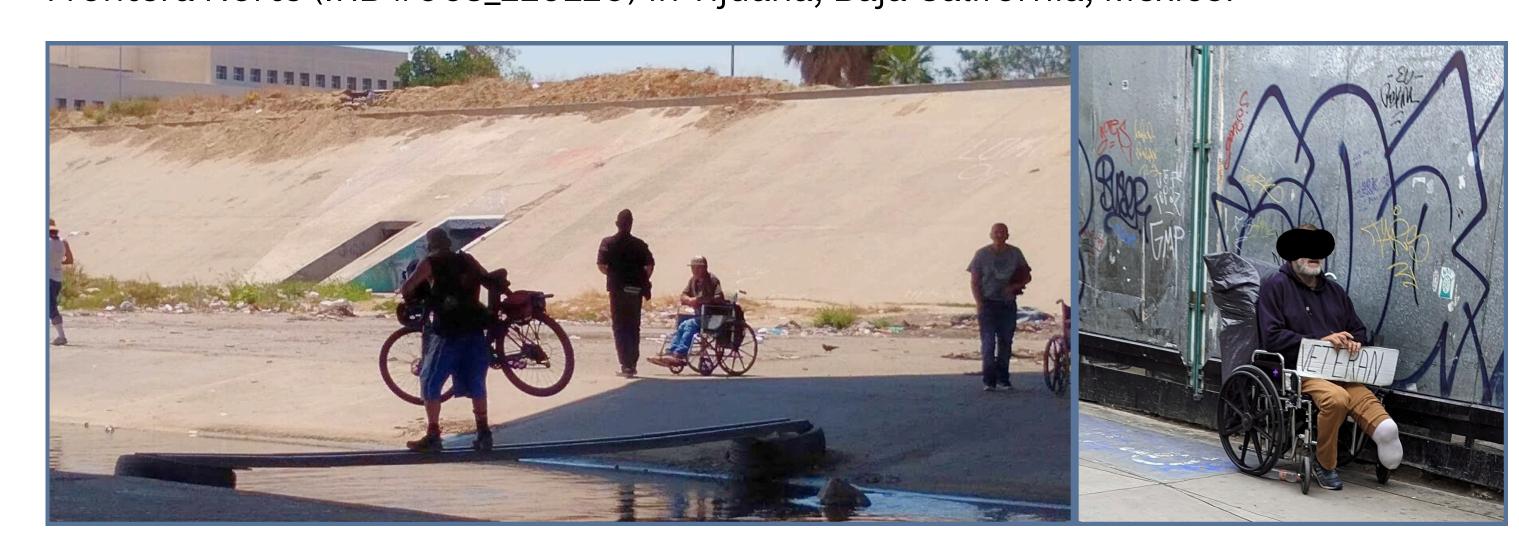
Disabilities, housing instability, and substance use are all associated with poorer well-being and health outcomes as well as discrimination. Despite the general sense that physical and mental disabilities are common for people who use drugs, there is little literature on the prevalence of disabilities within this population and their impact on quality of life.

Located in the Mexico-US border region, the binational Tijuana River Canal provides shelter to a large, mobile and highly marginalized community of people experiencing housing instability in Tijuana, Mexico. Many individuals living here struggle with lack of access to water, sanitation, and hygiene and basic public services, as well as increased substance use, police violence, inaccessible urban design, and general discrimination.

In this poster we provide the first description of the prevalence of physical and mental disabilities among people experiencing housing instability who were living in the Tijuana River Canal in Tijuana, Mexico in 2020-2024.

METHODS

This mixed-methods study leveraged data from surveys conducted from 2020-2021 (n=176) and qualitative interviews from fieldwork between 2020-2024 (n=56). Participants were age 18+, living in, or spent time in, the Tijuana River Canal. Self-reported disabilities were defined using Mexican standards from national surveys. The levels, specific impairments, and causes of disabilities in this population were compared to the general populations of proximate areas in Tijuana and Mexico as a whole. This study is part of the Socio-Environmental Tijuana River Project and received ethics approval from the institutional review boards of the El Colegio de la Frontera Norte (IRB #063_210120) in Tijuana, Baja California, Mexico.



Figures 1. Unhoused people who use drugs with disabilities at the Tijuana River Canal (left) and the US-Mexico crossing (right)

"I couldn't walk because I was pushed [by a police officer] from two stories high, and I hit my back [in the fall] ... I was crawling on the floor like a fucking dog. ... [When the ambulance came] the ambulance driver was having fun with me, like "use another fucking bag of chiva" (heroin) "so you can get up". I was like "hey don't laugh at me! I can't walk!"... they [the paramedics] threw me out on the street, and I slept on the fucking sidewalk right there" [Tom 40-year-old man living with HIV]

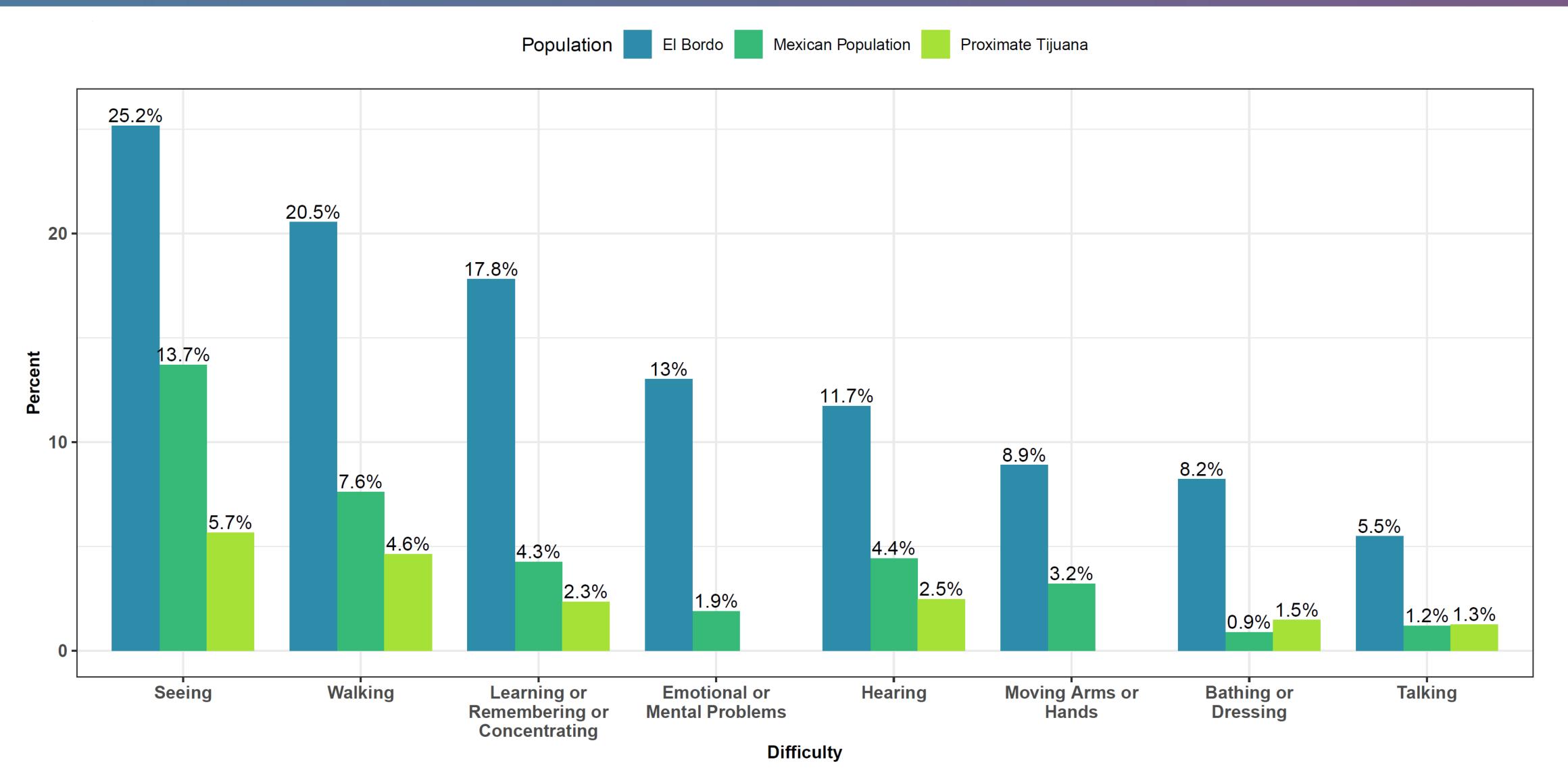


Figure 2. Unadjusted type and frequency of people self-reporting limitations and disabilities among people living or spending time in El Bordo in 2020-2021, and among the Tijuana population living in AGEBs adjoining the Tijuana River and the national Mexican population in 2018-2019

RESULTS

Out of 144 respondents, 90% were men, 9% were women, and 1% identified as transgender. Most participants experiencing homelessness (90%), has lived in the US (70%) and had been deported (53%). Some participants identified as Indigenous (22%) and Afro-Mexican/Black (10%), and 6% were 60-years-old or older. Half of the participants (49%) had some level of disability (Figure 1). The most commonly reported disabilities were visual (49%), motor (40%), intellectual (35%), and emotional (24%) limitations (Figure 2). More than half (55%) of those with a disability reported having 2 or more disability types.

Exposure to police victimization, contaminated river water, injuries from traffic (i.e. being struck by a car traveling at a high rate of speed), medical codntions, and interpersonal violence were common causes and contributing factors for disability. In addition, participants described feeling stigmatized and excluded from social and health services due to their disabilities as described in the quote.

When compared, the disability rates of the population of the Tijuana River canal higher than the rates in the city of Tijuana as well as the national rates of disability in Mexico.

DISCUSSION

Disabilities are prevalent among people who use drugs and are experiencing housing instability in the binational Tijuana River canal. Disabilities detract from quality of life as increased levels of perceived discrimination.

Various environmental and structural factors come into play in compounding the loss of quality of life faced by this population. The lack of a public psychiatric hospital and public physical rehabilitation center in Tijuana, exacerbates inequality in who can access preventive and rehabilitation health care services. The urban design of the Tijuana River canal and its surrounding motorways is not universally accessible and thus increases the risk of accidents that further exacerbate existing disabilities. Police raids in the canal are common and incarceration cycles last 36 hours, limiting adherence to medical treatments. As described in many geographies, systematic law enforcement against people experiencing homelessless can lead to the loss of belongings, such as walking aids, medication (e.g., HIV, tuberculosis, HCV), and IDs. In addition, as US foreign policy continues to shift towards deportation, the population inhabiting the Tijuana River canal is expected to grow.

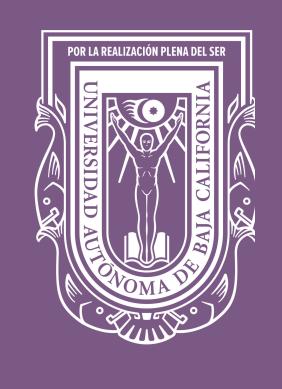
















REFERENCES

International Classification of Functioning, Disability and Health (ICF). (n.d.). https://www.who.int/standards/classifications/international-classification-of-functioning-disability-and-health
Calderón-Villarreal, A., Terry, B., Friedman, J., González-Olachea, S. A., Chavez, A., López, M. D., Bufanda, L. P., Martinez, C., Ponce, S. E. M., Cázares-Adame, R., Bochm, P. F. R., Kayser, G., Strathdee, S. A., Meléndez, G. M., Holmes, S. M., Bojorquez, I., Huertos, M. L., & Bourgois, P. (2022). Deported, homeless, and into the canal: Environmental structural violence in the binational Tijuana River. Social Science & Medicine, 305, 115044. https://doi.org/10.1016/j.socscimed.2022.115044

Banks, L. M., Kuper, H., & Polack, S. (2017). Poverty and disability in low- and middle-income countries: A systematic review. PLoS ONE, 12(12), e0189996

Richards, J., Henwood, B. F., Porter, N., & Kuhn, R. (2023). Examining the role of duration and frequency of homelessness on health outcomes among unsheltered young adults. Journal of Adolescent Health, 73(6), 1038–1045. https://doi.org/10.1016/j.jadohealth.2023.06.013
Nishio, A., Horita, R., Sado, T., Mizutani, S., Watanabe, T., Uehara, R., & Yamamoto, M. (2016). Causes of homelessness prevalence: Relationship between homelessness and disability. Psychiatry and Clinical Neurosciences, 71(3), 180–188. https://doi.org/10.1111/pcn.12469

Xu, K. Y., Gold, J. A., Szlyk, H. S., Rolin, S. A., & Shields, M. C. (2024). Mental Illness and Violence among People Experiencing Homelessness: An Evidence-Based Review. PubMed, 121(1), 14–20. https://pubmed.ncbi.nlm.nih.gov/38404439