

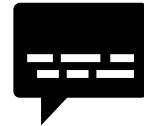
Managing Public Health Risks and Resilience to Climate-Related Disasters in Rural Communities



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Project Overview



Purpose

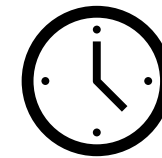
1. Refugees' current levels of social vulnerability in response to disasters,
2. The social determinants of health that predict refugees' health communication activities, and
3. The factors that shape refugees' perceptions of the health risks caused by **climate-related disasters.**



Research Site



Texas Panhandle



Timeline

Survey Data Collection

- December 2023 - May 2024



Research Questions

1. What are refugees' current levels of social vulnerability in response to the health risks caused by climate-related disasters in rural communities?
2. How do social determinants of health influence refugees' exposure to information about the health risks caused by climate-related disasters?
3. How do social determinants of health and refugees' exposure to health information affect refugees' knowledge about and perceptions of the health risks caused by climate-related disasters?

Methods

- Paper-and-pencil survey

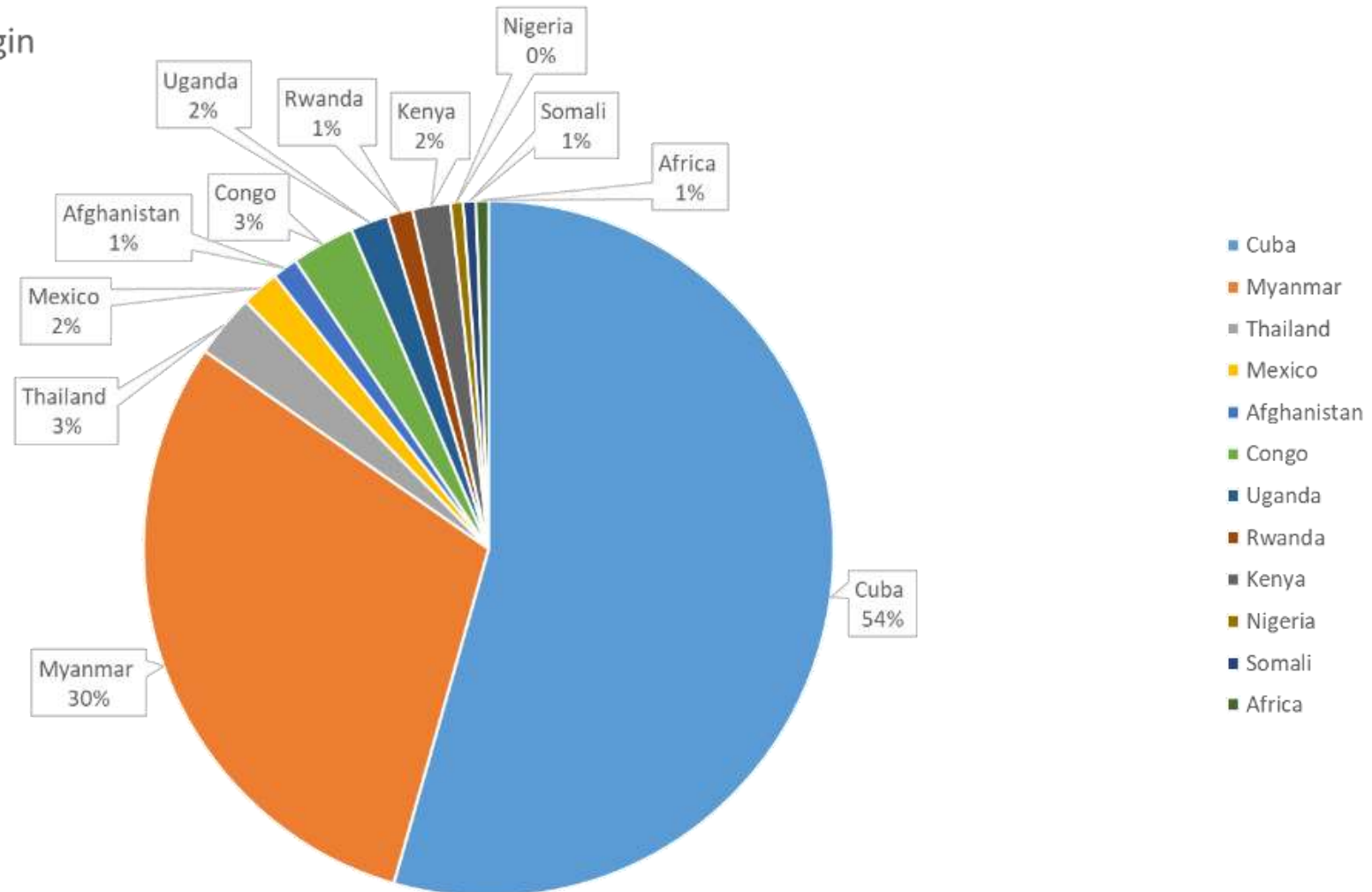


Sample (N = 177)

| | M | SD | Min | Max |
|--|----------|-----------|------------|------------|
| Age (years) (n = 176) | 37.97 | 12.98 | 18 | 78 |
| English proficiency (On a scale of 1-10) (n = 158) | 3.88 | 3.08 | 0 | 10 |
| Time of stay in the United States (months) (n = 164) | 76.19 | 101.07 | 0.13 | 720 |
| Household size (n = 175) | 4.16 | 1.99 | 1 | 10 |

Sample

Country of origin

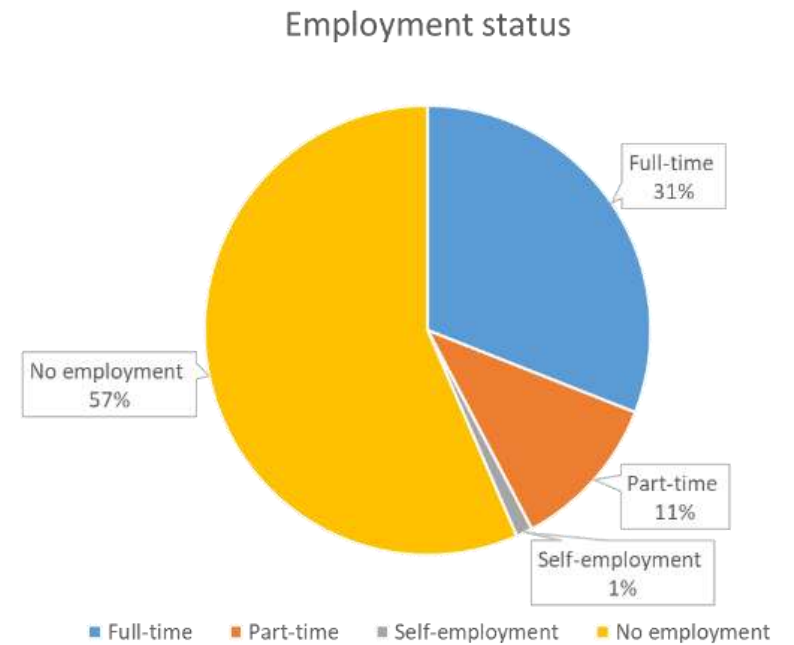
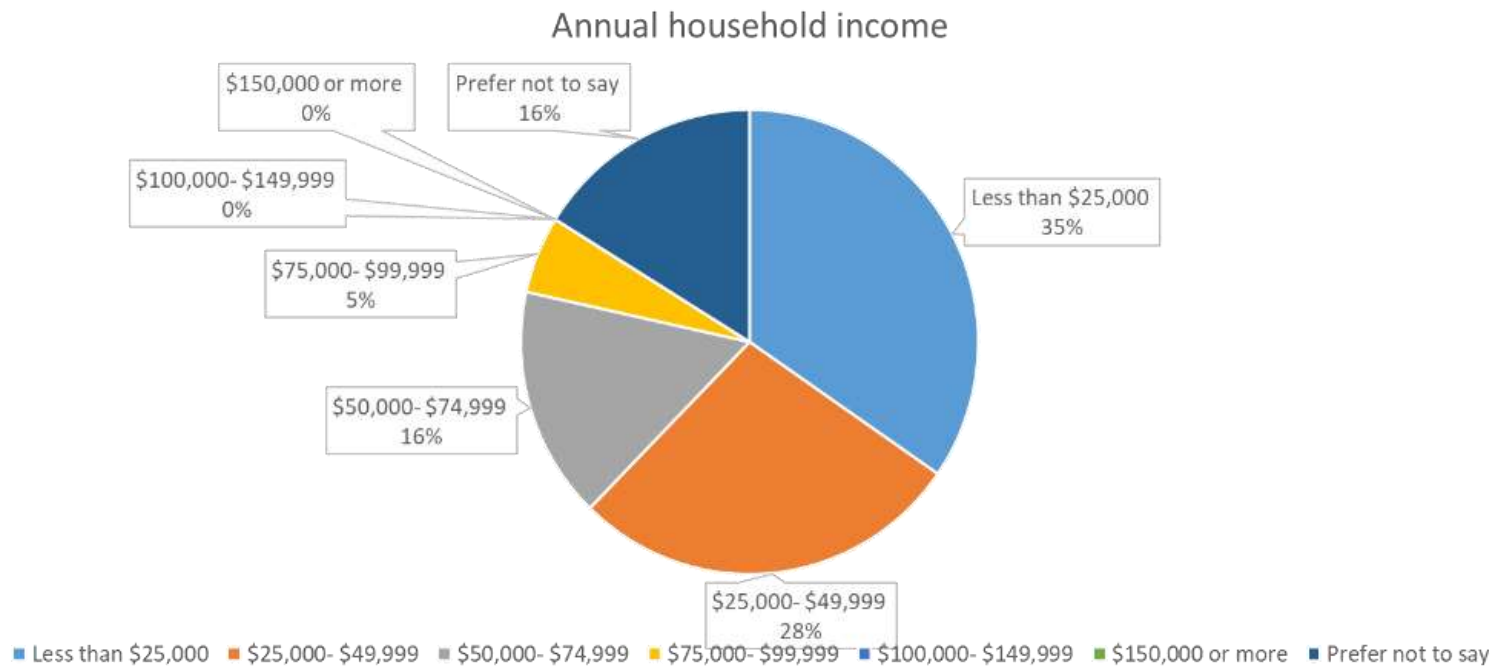


Preliminary Findings

- RQ1. What are refugees' current levels of social vulnerability in response to the health risks caused by climate-related disasters in rural communities?
 - The survey data show a significant socioeconomic disadvantage of refugees.



Preliminary Findings



Preliminary Findings

- Low perceived risk and awareness of climate-related disaster
- Prevalence of uncertainty

Preliminary Findings

- RQ2. How do social determinants of health influence refugees' exposure to information about the health risks caused by climate-related disasters?
 - Low level of exposure to all types of information sources
 - Low level of information seeking and scanning activities across all types of information sources

Preliminary Findings

- RQ3. How do social determinants of health and refugees' exposure to health information affect refugees' knowledge about and perceptions of the health risks caused by climate-related disasters?
 - Low level of disaster preparedness
 - Overall, older age, being male, lower income, better housing status, and more active involvement in social groups predicted higher perceived susceptibility to the health risks caused by climate-related disasters.
 - Those who perceived their neighborhood as safe and convenient were more likely to believe that preventive actions could effectively reduce the health risks caused by climate-related disasters.

Public Health Implication

1

- **Socioeconomic vulnerability and health risks.**
- Policies focusing on economic stability, language support, and educational initiatives could help alleviate barriers to workforce participation and socioeconomic integration among refugee populations.



Public Health Implication

2

- **Climate-related disaster preparedness.**
- Public health interventions should prioritize educational campaigns, community outreach programs, and disaster preparedness training tailored to the specific needs and cultural backgrounds of refugee communities.



Public Health Implication

3

- **Information seeking and scanning behaviors.**
- Public health initiatives should focus on leveraging trusted channels such as social media, community organizations, and refugee-serving agencies to disseminate reliable and culturally appropriate information about climate-related risks and the corresponding preventive actions.



Public Health Implication

4

- **Perceived susceptibility and response efficacy.**
- Improving neighborhood characteristics and building social support networks can enhance refugees' self-efficacy and response efficacy regarding climate-related health risks. Community-based interventions aimed at fostering social cohesion, neighborhood safety, and community resilience can empower refugees to adopt preventive actions and mitigate the negative impacts of disasters on health.



Public Health Implication

5

- **Policy implications.**
- Policymakers should prioritize investments in infrastructure, housing, and community development initiatives aimed at improving the resilience of vulnerable populations to climate-related disasters. These approaches include implementing zoning regulations, building codes, and land-use planning strategies that promote environmental sustainability and reduce



sustainability and reduce exposure to climate risks in

Acknowledgements

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