Assessing Mental Health Needs on the Texas-Mexico Border

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Overview

- University of Texas Rio Grande Valley (UTRGV)
- Collaborative on Innovation Health Innovation and Improvement (CoPHII)
- Context
- Lower Rio Grande Valley Community Health Survey
- Results
  - Mental health in the RGV
  - Integrated health care in the RGV
  - Health care utilization in the RGV
- Recommendations for policy and practice
The University of Texas Rio Grande Valley

- Created by the Texas Legislature in 2013; UTRGV enrolled its first class in Fall 2015, and the newly-founded School of Medicine welcomed its first class in Summer 2016.
- UTRGV has campuses and off-campus research and teaching sites throughout the Rio Grande Valley.
- UTRGV is one of the nation’s largest Hispanic-serving institutions, with over 28,000 students in Fall 2018 (89% Hispanic).
- UTRGV School of Medicine is one of the most affordable medical schools in the country for out-of-state students (U.S. News & World Report). It also has one of the most diverse student bodies with over half from underrepresented minorities.
UTRGV Division of Health Affairs

- Health Affairs
  - School of Medicine
    - Institute for Neurosciences
    - South Texas Diabetes and Obesity Institute
  - School of Nursing
  - School of Social Work
  - College of Health Professions
    - Pharmacy, Communication Sciences & Disorders, Biomedical Sciences, Human Performance, Occupational Therapy, Physician Assistant Studies, Rehabilitation Services & Counseling
Overview of CoPHII

Collaborative on Population Health Innovation and Improvement

• Two-year UT System initiative to support the development and implementation of strategic plans to address Texas’ most critical public health needs across UT’s different institutions and academic health centers
  • Year 1: Each health institution develops their population health strategic plan.
    • The strategic plan will address specific risk factors that relate to multiple health areas, specifically obesity, tobacco, and behavioral health (including mental health).
  • Year 2:
    • Implementation of the health strategy with the identified health priority.
    • Collaboration by health institutions on common health priorities.
    • Development of UT System’s Population Health Strategic Plan
• UTRGV School of Medicine is leading the effort for the Lower Rio Grande Valley
UTRGV CoPHII Mission

To position UTRGV as a national leader in population health innovation through productive community partnerships, educational excellence, and a rigorous research agenda focused on improving population health in the Rio Grande Valley and beyond.
UTRGV CoPHII Strategic Priorities

Strategic Priority 1: Community Resource
- Position UTRGV as a community resource for population health innovation and improvement through the provision of services that help identify health priority areas, that guide action on population health, and that assist in evaluating the impact of health policies and interventions.

Strategic Priority 2: Population Health Workforce Development
- Build a diverse health workforce with a keen understanding of the determinants of population health and health inequities and with the cultural skills necessary to serve an increasingly diverse population.

Strategic Priority 3: Population Health Sciences Innovation
- Advance population health sciences innovation through a transformative research agenda that responds to key trends in health and health care and their corresponding impact on population health.
### Strategic Priority 3 Goals

**Population Health Sciences Innovation**

<table>
<thead>
<tr>
<th>3.1</th>
<th>Conduct a biennial population-based survey that responds to key border and minority health policy information needs at the regional, state, &amp; national levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2</td>
<td>Support innovative interdisciplinary research projects that promise to advance population health sciences</td>
</tr>
<tr>
<td>3.3</td>
<td>Develop the infrastructure for disease registries that link potential research participants with the academic community</td>
</tr>
<tr>
<td>3.4</td>
<td>Build a network of community organizations and academicians that facilitates the creation of collaborative research teams aiming to advance population health</td>
</tr>
</tbody>
</table>
Objectives

• To examine mental healthcare needs in an underserved Hispanic population, including hard-to-reach, not-adequately-represented *colonia* communities

• To inform local and state health policy and planning decisions to alleviate mental health disparities in Hispanic communities
Context
The lower Rio Grande Valley

- 4 Counties: Cameron, Hidalgo, Starr, and Willacy
- Population
  - 1.4 million people
- Projected 2030 population
  - 2 million
- Ethnicity
  - 90% of Hispanic or Latino origin
Context
Sociodemographic Characteristics

<table>
<thead>
<tr>
<th>Category</th>
<th>U.S.</th>
<th>Texas</th>
<th>RGV</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school graduates</td>
<td>87%</td>
<td>82%</td>
<td>63%</td>
</tr>
<tr>
<td>People living in poverty</td>
<td>15%</td>
<td>17%</td>
<td>33%</td>
</tr>
<tr>
<td>Uninsured (18-64 yrs. old)</td>
<td>12%</td>
<td>23%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates; 2016 Small Area Health Insurance Estimates
Context

Health Profile

Sources: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System; University of Washington, Institute for Health Metrics and Evaluation.
Context

Mental Health in the Lower Rio Grande Valley

Mental health disparities in Hispanic communities are exacerbated by:

• Reduced access to mental health services due to mental health professionals shortages and lack of affordability

• Decreased likelihood of receiving needed services (e.g., stigma, inadequate mental health literacy)

• Higher likelihood of receiving poor quality treatment

Bureau of Labor Statistics, Occupational Employment Statistics; Texas Department of State Health Services, Health Professions Resource Center.
Lower RGV Community Health Survey

Methods

- RDD telephone survey conducted by trained student interviewers
  - 65% wireless, 35% landline
  - Oversample of Starr and Willacy counties
  - Data collection: March – July 2018
  - N=615

- Field survey conducted by *promotoras* (community health workers) in Cameron County
  - ~1359 colonias in the lower RGV with median population of 90
  - Systematic random sampling of 10 colonias in Cameron County with population >=30
  - Data collection: June-July 2018
  - N = 150
Lower RGV Community Health Survey
Survey Instrument

- Mental health
  - Depression (PHQ-9); Anxiety (GAD-7); Poor mental health days; PTSD
- Physical health
  - Self-rated health; chronic diseases; Pain; Disability
- Potential correlates of mental health outcomes
  - Resilience
  - Social support
  - Material hardship
  - Adverse childhood experiences
  - Domestic violence
- Sociodemographic characteristics
- Telehealth
Lower RGV Community Health Survey
Statistical analysis

- Descriptive analysis of mental health disparities and service needs
  - Mental health outcomes
    - Compare to estimates for Texas and US where possible
  - Service needs
    - Mental health care utilization
    - Integrated care

- Multivariate analysis predicting correlates of mental health outcomes
  - Control for age, sex, foreign-born, marital status, educational attainment, employment, number of children in household, whether in fair or poor health, material hardship, adverse childhood circumstances and social support
Lower RGV Community Health Survey
Sampled Colonias
Lower RGV Community Health Survey
Telephone survey response rates

Of 31,278 numbers
16,832 non-working #s:
- Disconnected
- Fax lines
- Businesses

Of 14,446 Working numbers
10,310 were not reached
- Line Busy
- No answer

Of 4,181 Answered calls
- 55: ineligible (<18 years or not residing in Rio Grande Valley
- 3,257: Refusals
- 615 Consented

615 completed surveys
10.0%

150 completed field surveys
66%

Response rates in other telephone surveys:
PSRAI Omnibus Survey: 4-5%
California Health Interview Survey: 17-18%
2016 BRFSS (Texas): 37-40%
## Lower RGV Community Health Survey

Unweighted sample characteristics (n=765)

<table>
<thead>
<tr>
<th>County</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameron</td>
<td>41.3</td>
</tr>
<tr>
<td>Hidalgo</td>
<td>36.0</td>
</tr>
<tr>
<td>Starr</td>
<td>14.9</td>
</tr>
<tr>
<td>Willacy</td>
<td>7.9</td>
</tr>
<tr>
<td>Completed survey in Spanish</td>
<td>53.5</td>
</tr>
<tr>
<td>Completed field survey</td>
<td>18.5</td>
</tr>
</tbody>
</table>

Source: Lower RGV Community Health Survey
### Lower RGV Community Health Survey

Sample characteristics (n=765)

Percent reported unless otherwise specified

<table>
<thead>
<tr>
<th></th>
<th>Unweighted</th>
<th>RGV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>65.0</td>
<td>51.3</td>
</tr>
<tr>
<td>Foreign-born</td>
<td>44.7</td>
<td>37.4</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>94.2</td>
<td>90.0</td>
</tr>
<tr>
<td>Married</td>
<td>51.7</td>
<td>49.4</td>
</tr>
<tr>
<td>High school graduate</td>
<td>66.1</td>
<td>63.3</td>
</tr>
<tr>
<td>Income less than $15,000</td>
<td>26.3</td>
<td>22.6</td>
</tr>
<tr>
<td>Age (mean reported)</td>
<td>46.2 years</td>
<td>44.5 years</td>
</tr>
</tbody>
</table>

Note: MOE +/- 4 percent

Sources: Unweighted estimates are based on the Lower RGV Community Health Survey. RGV numbers are based on the U.S. Census Bureau’s American Community Survey 2012-2016 five-year estimates.
## Lower RGV Community Health Survey

### Sample characteristics (n=765)

Percent reported unless otherwise specified

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>In fair or poor health</td>
<td>28.7</td>
</tr>
<tr>
<td>Experienced material hardship</td>
<td>37.6</td>
</tr>
<tr>
<td>Economic hardship</td>
<td>27.9</td>
</tr>
<tr>
<td>Any adverse childhood experience(s)</td>
<td>59.7</td>
</tr>
<tr>
<td>Social support (mean reported) Range: 8-32</td>
<td>26.7</td>
</tr>
</tbody>
</table>

Note: Weighted to represent RGV population based on American Community Survey 2012-2016

Source: Lower RGV Community Health Survey
Lower RGV Community Health Survey
Mental health in the RGV

Percent reported unless otherwise specified

<table>
<thead>
<tr>
<th></th>
<th>RGV</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate Depression (PHQ-9 ≥ 10)</td>
<td>14.1</td>
<td>8.1</td>
</tr>
<tr>
<td>Moderate Anxiety (GAD-7 ≥ 10)</td>
<td>10.6</td>
<td>2.9</td>
</tr>
<tr>
<td>Number of poor mental health days in past month</td>
<td>3.8</td>
<td>3.1</td>
</tr>
<tr>
<td>14 or more poor mental health days in past month</td>
<td>13.4</td>
<td>11.2</td>
</tr>
<tr>
<td>Has symptoms of PTSD</td>
<td>7.7</td>
<td>8.0</td>
</tr>
<tr>
<td>Heavy drinking</td>
<td>13.0</td>
<td>18.0</td>
</tr>
<tr>
<td>Illicit drug use</td>
<td>6.0</td>
<td>19.3</td>
</tr>
</tbody>
</table>

Note: RGV estimates are weighted to represent RGV population based on American Community Survey 2012-2016; unweighted ns range from 718-759.

Sources: Lower RGV Community Health Survey; 2016 BRFSS (Poor mental health days, Heavy drinking ;) 2013-2016 NHANES (Depression, 20 years and older); 2003-2004 NCS-R (Anxiety}; National Center for PTSD (PTSD); 2017 NSDUH (Illicit drug use)
**Lower RGV Community Health Survey**

Selected odds ratios from models predicting mental health

<table>
<thead>
<tr>
<th>Variable</th>
<th>Depressed</th>
<th>Anxious</th>
<th>&gt;13 Poor MHD</th>
<th>PTSD</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. born</td>
<td>2.950**</td>
<td>1.595+</td>
<td>2.134+</td>
<td>4.564*</td>
</tr>
<tr>
<td>Aged 65 and over</td>
<td>0.163**</td>
<td>0.938</td>
<td>0.571</td>
<td>1.169</td>
</tr>
<tr>
<td>Male</td>
<td>0.819</td>
<td>0.564*</td>
<td>1.251</td>
<td>0.769</td>
</tr>
<tr>
<td>Married</td>
<td>0.881</td>
<td>0.760</td>
<td>0.783</td>
<td>1.513</td>
</tr>
<tr>
<td>High school graduate</td>
<td>0.683</td>
<td>1.380</td>
<td>1.083</td>
<td>1.168</td>
</tr>
<tr>
<td>In fair or poor health</td>
<td>4.073***</td>
<td>1.999**</td>
<td>5.638***</td>
<td>2.555*</td>
</tr>
<tr>
<td>Social support</td>
<td>0.914***</td>
<td>0.986</td>
<td>0.951*</td>
<td>0.951</td>
</tr>
<tr>
<td>Material hardship</td>
<td>1.202*</td>
<td>1.576***</td>
<td>1.361***</td>
<td>1.414**</td>
</tr>
<tr>
<td>Adverse childhood experiences</td>
<td>1.106+</td>
<td>1.194**</td>
<td>1.041</td>
<td>1.250**</td>
</tr>
<tr>
<td>Field survey</td>
<td>0.493</td>
<td>0.589*</td>
<td>0.856</td>
<td>0.833</td>
</tr>
</tbody>
</table>

Note: + p < 0.10; * p < 0.05; ** p < 0.01; *** p < 0.001

Source: Lower RGV Community Health Survey
Lower RGV Community Health Survey

Summary: Mental health outcomes

• Mental health issues in the RGV are higher than previously reported in Hispanic communities

• Good news: low rates of risk behaviors

• In multivariate models, unique stressors in RGV (high levels of material hardship and ACEs) predict mental health outcomes
## Lower RGV Community Health Survey

### Mental health care utilization in the RGV (n=764)

Percent reported unless otherwise specified

<table>
<thead>
<tr>
<th>Description</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported any mental health days, moderate depression or moderate anxiety</td>
<td>38.1</td>
</tr>
<tr>
<td>Among those reporting any poor mental health days, moderate depression or moderate anxiety (n=291):</td>
<td></td>
</tr>
<tr>
<td>Felt the need to talk to a counselor or other health professional in past 12 months</td>
<td>38.6</td>
</tr>
<tr>
<td>Saw a counselor or talked to another health professional in the past 12 months</td>
<td>21.1</td>
</tr>
</tbody>
</table>

Source: Lower RGV Community Health Survey
This chart shows the percentage of respondents reporting the reason that they did not seek counseling for reported mental and emotional health problems. Other responses included: a lack of time, and seeking support from others (e.g. friends, neighbors, priests).

Source: Lower RGV Community Health Survey
Lower RGV Community Health Survey

Summary: Mental health care utilization

• Only 1 in 5 of those reporting mental health problems actually saw a counselor

• Affordability and not knowing where to go was a barrier to seeking care

• “I can handle this” – need for patient education and outreach to improve mental health literacy
### Lower RGV Community Health Survey

#### Integrated health care in the RGV (n=754)

<table>
<thead>
<tr>
<th>Access to integrated health care (Percent)</th>
<th>Would you like to have the following services available at your doctor’s office? (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saw another team member during doctor visit</td>
<td>15.7</td>
</tr>
<tr>
<td>Saw a psychologist, counselor or behavioral health provider during doctor visit</td>
<td>4.4</td>
</tr>
<tr>
<td>Mental, behavioral and emotional health services</td>
<td>73.5</td>
</tr>
<tr>
<td>Smoking cessation</td>
<td>55.3</td>
</tr>
<tr>
<td>Family counseling</td>
<td>68.1</td>
</tr>
</tbody>
</table>

Source: Lower RGV Community Health Survey
Lower RGV Community Health Survey

Summary: Integrated health care

• About ¾ of respondents would like to have counseling and mental health services through their healthcare providers

• In RGV, disconnect between what patients want and what they can easily access
Lower RGV Community Health Survey

Concluding remarks

• Higher rates of self-reported depression and anxiety compared to national rates
  • Most not receiving treatment
• Barriers for accessing mental health services are both real and perceived
  • Real: Lack of sufficient mental health providers
  • Perceived: Underestimate disease severity which leads to “I can handle this myself”
• It appears that cultural stigma (“I am embarrassed to talk to a counselor”) regarding mental health is becoming less of a barrier in the border Hispanic population
  • Is this an indication of greater acceptability of mental illness as an entity that affects health (just like diabetes)?
  • Could this indicate greater awareness and acknowledgment regarding the role of mental illness?
  • Does this present an opportunity for better acceptance of education, health promotion and prevention programs related to mental health?
• Important role of risk factors (socioeconomic, health status, ACE, etc.)
Lower RGV Community Health Survey

Limitations

• Survey did not include more serious mental illness (psychosis, schizoaffective disorders, etc.)

• Survey did not include children or youth—a population whose mental health needs are complex, resource-intensive and require specialized care
Lower RGV Community Health Survey
Policy/practice recommendations

- Regional and state-wide planning to address availability and access to mental health services
  - UT System: CoPHII Initiative, strategy meetings with Chairs of Psychiatry Departments
- Case management for early intervention of risk factors
- Mental health services through mobile units and telemedicine (colonias, rural areas)
- Training of promotoras to assist with efforts in education and health promotion
- Promote/expand initiatives aimed at increasing the number of mental health providers in the Valley
  - UT Rio Grande Valley initiatives:
    - Development of a Department of Psychiatry through the School of Medicine
    - Psychiatry Residency
    - Doctoral Program in Clinical Psychology
    - Integrated Behavioral Health Training for Family Medicine Residents
Questions

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