Community Health Workers in Action on the Research and Practice Frontline

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Vietnamese Initiatives in Economic Training (VIET)
What is a Community Health Worker (CHW)?
What do CHWs do?

- Capacity building
- Community-based research
- Health education and outreach
- Individual and community advocacy
- Care coordination and patient navigation
- Assisting with access to medical and non-medical services
- Social support
- Cultural mediation
CHW Training

CHW Curriculum - Modules

Core Public Health Topics
- Public Health
- Social Determinants of Health
- Cultural Competency
- Field Experiences
- Health Education

Specialty Public Health Topics
- Obesity
- Diabetes
- Cancer
- Zika and dengue
Gulf Resilience on Women’s Health (GROWH)

Four overall aims for 3 research projects and the CODC:

• Determine the effects of the DWH disaster, combined with the other adversities faced by the area, on mental health and reproductive outcomes among pregnant women and women of reproductive age living in affected parishes in Louisiana.

• Characterize exposures of pregnant women and women of reproductive age to selected contaminants through exposure routes of concern to communities - specifically seafood consumption and air.

• Examine the interactions of environmental and social disparities on the health of pregnant women and women of reproductive age.

• Utilize community-based participatory research and outreach strategies to strengthen community resilience in vulnerable Gulf Coast populations.
GROWH Project

Inclusion:
- WIC-eligible, first-time mothers, 18-45 y.o., living in SE LA

Cohort 1 (N=96) & Cohort 2 (N=141)

Visit 1: 1st trimester
Visit 2: 2nd trimester
Visit 3: 3rd trimester
Visit 4: Delivery
Visit 5: 6 weeks postpartum
6 mos postpartum

CHW: data collection, follow ups, case management, community engagement

Intervention

2-way Mobile Technology: scheduling, health education, disaster messaging
Therapeutic Relationship
CHW-Participant

Scale to Assess Therapeutic Relationship (STAR)

## Associations between nonchemical stressors measured at 6 weeks postpartum and birth outcomes

<table>
<thead>
<tr>
<th>Non-chemical Stressors</th>
<th>Birth Outcome</th>
<th>t-test</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Normal</td>
<td>Adverse</td>
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</tr>
<tr>
<td>Positive Interaction with CHW</td>
<td>17.50±3.58</td>
<td>17.44±3.49</td>
<td>0.07</td>
</tr>
<tr>
<td>Negative Interaction with CHW</td>
<td>9.28±3.00</td>
<td>10.32±1.70</td>
<td>-2.16</td>
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<tr>
<td>Edinburgh Postnatal Depression Scale</td>
<td>4.18±3.95</td>
<td>6.28±4.39</td>
<td>-2.25</td>
</tr>
<tr>
<td>Psychological Distress Scale</td>
<td>9.12±3.10</td>
<td>10.92±3.89</td>
<td>-2.38</td>
</tr>
<tr>
<td>State Anxiety</td>
<td>31.49±8.16</td>
<td>36.36±10.74</td>
<td>-2.40</td>
</tr>
<tr>
<td>Physical Functioning (Sf12)</td>
<td>54.69±7.26</td>
<td>49.34±10.81</td>
<td>2.32</td>
</tr>
<tr>
<td>Mental Functioning (Sf12)</td>
<td>41.19±5.68</td>
<td>39.49±6.42</td>
<td>1.26</td>
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</table>
Comparison of average EPDS scores between CHW- and non–CHW cohorts at 6 months postpartum

<table>
<thead>
<tr>
<th>Variables</th>
<th>Level</th>
<th>CHW</th>
<th>N</th>
<th>Mean±Std Dev</th>
<th>p-value</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Overall/non-stratified</td>
<td>No</td>
<td>58</td>
<td>6.26±6.16</td>
<td>0.02</td>
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<tr>
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<td></td>
<td>Yes</td>
<td>107</td>
<td>4.15±3.71</td>
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<tr>
<td>Income</td>
<td>&lt;10,000</td>
<td>No</td>
<td>16</td>
<td>5.38±6.02</td>
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<td></td>
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<td>Yes</td>
<td>53</td>
<td>3.91±3.69</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt;10,000</td>
<td>No</td>
<td>33</td>
<td>6.36±5.74</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>45</td>
<td>4.69±3.95</td>
<td></td>
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<tr>
<td>Marital Status</td>
<td>Married/partner</td>
<td>No</td>
<td>24</td>
<td>4.29±3.95</td>
<td>0.94</td>
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<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>45</td>
<td>4.22±3.94</td>
<td></td>
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<tr>
<td></td>
<td>Single</td>
<td>No</td>
<td>31</td>
<td>7.52±7.14</td>
<td>0.02</td>
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<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>60</td>
<td>4.10±3.63</td>
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<tr>
<td>Race</td>
<td>White Non-Hispanic</td>
<td>No</td>
<td>17</td>
<td>7.65±6.02</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>26</td>
<td>4.00±3.97</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Black non-Hispanic</td>
<td>No</td>
<td>26</td>
<td>5.92±7.09</td>
<td>0.31</td>
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<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>60</td>
<td>4.42±3.74</td>
<td></td>
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<tr>
<td></td>
<td>Other</td>
<td>No</td>
<td>7</td>
<td>6.14±5.24</td>
<td>0.16</td>
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<td></td>
<td></td>
<td>Yes</td>
<td>18</td>
<td>2.89±2.27</td>
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</table>

Culturally-informed Risk Perceptions

<table>
<thead>
<tr>
<th>Threats in the environment</th>
<th>Frequency (%)</th>
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</thead>
<tbody>
<tr>
<td>Violence</td>
<td>55</td>
</tr>
<tr>
<td>Hurricanes</td>
<td>55</td>
</tr>
<tr>
<td>Outdoor air</td>
<td>45</td>
</tr>
<tr>
<td>Drugs</td>
<td>40</td>
</tr>
<tr>
<td>Indoor air</td>
<td>35</td>
</tr>
<tr>
<td>Cigarette smoke</td>
<td>35</td>
</tr>
<tr>
<td>Reckless drivers</td>
<td>30</td>
</tr>
<tr>
<td>Floods</td>
<td>25</td>
</tr>
<tr>
<td>Money problems</td>
<td>25</td>
</tr>
</tbody>
</table>

Stratified sample were asked:

- “What are the things in the environment that threaten mothers and children in your community?”
- “What are ways that mothers prepare or respond to these things?”
- “Who do mothers typically turn to for each of these things?”

GRHOP CHW Placement Program

- 18 subcontracts with FQHCs and community-based organizations to employ CHWs in AL, LA, FL, & MS
- Subcontracts included:
  - 1 full-time or 2 part-time CHWs
  - 10% effort for supervision of CHW
  - Travel, supplies, etc.
- Most organizations were funded for 4.5 yrs
- Keys to success:
  - Salary support (10%) for supervisors → Organizational buy-in
  - Extensive monitoring and evaluation → Maximized benefits
CHW Placements in Louisiana

<table>
<thead>
<tr>
<th>Organization</th>
<th>Parish</th>
<th>CBO/FQHC</th>
<th>Population focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jefferson Community Health Clinic</td>
<td>Jefferson</td>
<td>FQHC</td>
<td>Latino community</td>
</tr>
<tr>
<td>NOELA Community Health Center</td>
<td>Orleans</td>
<td>FQHC</td>
<td>Vietnamese community</td>
</tr>
<tr>
<td>Teche Action Clinic</td>
<td>Terrebonne &amp; Lafourche</td>
<td>FQHC</td>
<td>All</td>
</tr>
<tr>
<td>Friends of Lafitte Greenway</td>
<td>Orleans</td>
<td>CBO</td>
<td>All</td>
</tr>
<tr>
<td>New Orleans Musicians' Clinic</td>
<td>Orleans</td>
<td>CBO</td>
<td>Uninsured musicians</td>
</tr>
<tr>
<td>Plaquemines Community CARE Center</td>
<td>Plaquemines</td>
<td>CBO</td>
<td>All</td>
</tr>
<tr>
<td>United Houma Nation</td>
<td>Terrebonne</td>
<td>CBO</td>
<td>Native American community</td>
</tr>
<tr>
<td>VIET</td>
<td>Orleans</td>
<td>CBO</td>
<td>Vietnamese community</td>
</tr>
</tbody>
</table>
Vietnamese Initiatives in Economic Training (VIET)

- Resource center for minority residents in Louisiana
  - Mainly Vietnamese-Americans
- Located in New Orleans East
- Educational and economic training programs
- One-stop shop
- Importance of being from the community
  - Need strong familiarity with community layout and available resources
  - Helps clients connect and open up
CHWs at VIET: Huyen Tran

- Link clients to resources in community
- Help clients navigate the healthcare system
  - Health insurance enrollment
- Afterschool programs and summer camps
- Assistance in filing taxes
- Programming for elderly
How do CHWs at VIET help bridge the cultural divide?

Address barriers related to LANGUAGE
How do CHWs at VIET help bridge the cultural divide?

Address barriers related to AGE
How do CHWs at VIET help bridge the cultural divide?

Address barriers related to LITERACY
How do CHWs at VIET help bridge the cultural divide?

Facilitate ACCULTURATION (habits & customs)
GRHOP Practice-based Research

- CHWs and CHW supervisors recently reported in interviews (n=42) that CHWs:
  - Facilitated clients’ access to healthcare and other resources in the community
  - Improved community trust and rapport
  - Informed clinic programming to make it more relevant and effective
  - Increased the number of patients/clients seen through the CHW’s organization
  - Alleviated medical staff from addressing clients’ non-medical issues

- Enablers to CHW program success (Sherman et al., 2017) include:
  - Invested in local relationships and maintained strong presence in community
  - Prioritized outreach and tailored communication to appropriate channel
  - Streamlined existing resources
  - Leveraged existing partnerships
  - Provided transportation services and vouchers to clients
  - Established a clear operating plan and frequent communication within organization

- Organizational buy-in highlights the sustainability of the model
  - The majority of organizations will fund the CHW position after GRHOP funding ends

Conclusions

• Next steps: Creating sustainability in research and practice

• Implications for:
  – **Science**: environmental health literacy will help improve CHW role in CBPR
  – **Policy**: value of citizen science
  – **Practice**: improve access to and quality of health services
Thank you!

Questions? Comments?

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