Health and Demographic Disparities in Recovery from Hurricane Katrina:

The KATRINA@10 Program

With a special focus on Vietnamese-Americans

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A brief history
A Bad Day Gets Better...
The KATRINA@10 Program: What it is

- An interrelated set of three primary data collection projects that focus on specific sub-populations who were uniquely affected by Hurricane Katrina (RP 1-3)
- Two secondary analyses of data that are more broadly representative of the overall affected population (RP 4-5)
- Three cores to support the set of Research Projects.
The KATRINA@10 Program: What it is exploring

1. How do trajectories of long-term recovery differ among and within these highly-affected but distinct sub-populations?

2. How do these specific trajectories of recovery compare with those of well-studied mainstream populations?

3. How do the effects of pre-disposing factors (such as poverty) and degree-of-impact (such as flooding depth) vary among our three special sub-populations?

4. What are the determinants of long-term recovery in domains such as mental and physical health, socio-economic status, and community and social roles?
The KATRI NA@10 Program: What it is exploring

5. How well does our theoretical model predict recovery across the three cohort studies (RP 1-3)?
Some Central Strengths

- **Breadth**: 2 studies focusing on the entire city and region
- **Depth**: 3 cohort studies of uniquely-affected populations
- **Data**: Longitudinal for all 3 cohorts; pre and post-exposure for 2 cohorts
- **Duration**: Short-term (1-2 years), medium-term (5 years); and long-term (10 years) perspectives
- **The team**: Broad expertise from 8 institutions
The Five Studies

1. Resilience in Survivors of Katrina Project; RISK
2. Gulf Coast Child and Family Health Study; GCAFH
3. Katrina Impacts on Vietnamese Americans in New Orleans; KATIVA NOLA
4. Broad Impacts; DNORS ANALYSIS
5. New Demographics; NEW NOLA
Resilience in Survivors of Katrina Project; RISK
Mary Waters, Lead

- Began in 2003
- 1,019 low-income parents from New Orleans enrolled in a study designed to increase educational attainment among community college students
- Since the hurricane, two follow-up waves

**Illustrative finding:**
- At one year after Katrina baseline data did not predict location.
- At five years afterwards, individual characteristics began to influence location, and location began to influence people.

Gulf Coast Child and Family Health Study; GCAFH
David Abramson, Lead

- Began in early 2006
- 1,079 displaced and highly Katrina-exposed Louisiana and Mississippi residents
- Since the hurricane, 4 waves
- **Illustrative finding:** Over one-third of the children in this displaced and highly-impacted cohort were still experiencing Serious Emotional Disturbance nearly five years after Katrina.

http://ncdp.columbia.edu/microsite-page/g-cafh/home/
Displaced New Orleans Residents Study; DNORS
Narayan Sastry, Lead

- Began in 2009
- 3670 residents are representative of New Orleans’ pre-Katrina population.
- Aim: discern the location, living arrangements, health, and well being of residents who were displaced by the hurricane.

**Illustrative finding:**
- Blacks were substantially more likely than whites to remain displaced at the 4 year mark.
- But these racial differences are insignificant once home damage is considered.

http://www.rand.org/labor/projects/dnors.html
Aim: Examine the role of in- and out-migration in the unequal repopulation of New Orleans by using the American Community Survey (ACS) for all years between 2005 and 2015.

Future plans: With ACS data, analyze the socio-demographic composition of in- and out-migration flows to and from New Orleans to document how these changed over time and reflect inequality in the timing of recovery.
Katrina Impacts on Vietnamese Americans in New Orleans, LA; KATIVA NOLA
Mark VanLandingham and Mai Do, co-Leads

- Began in 2003
- 709 Vietnamese nationals and immigrants were surveyed to examine the impact of emigration upon health status.
- The 125 Vietnamese immigrants were interviewed before Katrina in 2005; and then re-interviewed after Katrina at $T_1$, $T_2$, $T_5$, and $T_{13}$ to assess post-disaster recovery.
- http://sph.tulane.edu/publichealth/mhosa/kativanola.cfm
Photo by the author, 2005.
Figure 8-10.
Typical interior flood damage to residential building in New Orleans, showing extensive mold growth (circle)
Katrina Impacts on Vietnamese Americans in New Orleans, LA; KATIVA NOLA

- **Illustrative finding:** The trajectory of post-Katrina recovery for Vietnamese Americans is much stronger than it is for similarly-affected groups.
<table>
<thead>
<tr>
<th><strong>Dimensions and measures of recovery</strong></th>
<th><strong>Abramson et al.</strong></th>
<th><strong>Results for the Vietnamese</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Housing stability</strong></td>
<td></td>
<td>Rapid and high rates of return <em>vis-à-vis</em> other groups.</td>
</tr>
<tr>
<td><strong>Physical health</strong></td>
<td></td>
<td>Decline in 2006; rebound in 2007.</td>
</tr>
<tr>
<td><strong>Mental health</strong></td>
<td></td>
<td>Decline in 2006; rebound in 2007.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Very low PTSD <em>vis-à-vis</em> other groups.</td>
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<tr>
<td></td>
<td></td>
<td>Better mental health than neighbors in adjacent communities</td>
</tr>
<tr>
<td><strong>Economic stability</strong></td>
<td></td>
<td>High employment <em>vis-à-vis</em> other groups.</td>
</tr>
<tr>
<td><strong>Social role adaptation</strong></td>
<td></td>
<td>Extraordinary community mobilization post-Katrina.</td>
</tr>
</tbody>
</table>
Why are the Vietnamese doing so well?
The Central Paradigm:
Resilience

The process of “linking a set of adaptive capacities to a positive trajectory of functioning and adaptation after a disturbance.”

Dimensions

- Economic development
- Social capital
- Information and communication
- Community competence

Norris et al. 2008
The mismatch:
Could culture be the missing piece?
What do social scientists mean by culture?

Birx 2010:
- For anthropologists, culture tends to refer to symbolic systems of beliefs, values, and *shared understandings that render the world meaningful and intelligible for a particular group of people.
What are shared understandings?

**Narratives:** The telling, re-telling and refining of key elements of a group’s common history.

**Symbolic boundaries:** Serve to distinguish members of the group from outsiders.

**Frames:** Perspectives or orientations, similar to a lens or filter through which we view and interpret our social world.

**Cultural toolkits:** Repertoires of behavior (coping strategies) that vary systematically among groups.
Post-Katrina, Vietnamese Success

By Mark J. Vanlandingham

Aug. 14, 2015

Phuc Nguyen, right, is one of the Vietnamese immigrants in Village de l’Est in New Orleans. Victoria Nguyen, left, is of Vietnamese descent. Edmund D. Fountain for The New York Times

IT has been 10 years since Hurricane Katrina struck New Orleans, and in the Vietnamese enclave of Village de l’Est, a neighborhood in a remote eastern corner of the city that was extensively flooded, there are now signs that the community is finally rebuilding.
Example 1:
A narrative of survival

An enduring account of repeatedly overcoming adversity.

Example 2:
A frame of insularity

A strong distrust of government and corporate institutions.

Photo by the author, 2007.
Next steps: Efforts to quantify and operationalize culture

Culture
symbolic systems of beliefs, values, and shared understandings that render the world meaningful and intelligible for a particular group of people (Beldo 2010)

- Cultural Consensus
  Individual competence in providing the culturally appropriate answer to a series of related questions

- Ethnic Capital
  Degree of affiliation and perceived benefit from affiliation with a particular ethnic group

- Community Resilience
  - Community Competence
  - Information and Communication
  - Economic Resources
  - Social Connection

- Recovery
  - Mental health
  - Physical health
  - Housing stability
  - Economic stability
  - Social role adaptations
Next steps: Expansion of the study to focus on cognitive decline among Vietnamese elderly (in collaboration with NIA)

Specific aims:

1. Adapt, translate, and validate culturally-appropriate measures that are essential to the proper assessment and treatment of AD/ADRD among older Vietnamese Americans.

2. Assess the relationship between earlier trauma and the timing of subsequent onset of AD/ADRD for elderly Vietnamese Americans using quantitative approaches.

3. Explore in more depth the relationship between earlier trauma and the timing of subsequent onset of AD/ADRD for elderly Vietnamese Americans using qualitative approaches, in particular, using a life history approach.
Conclusions

1. Thank you for your support of demography and the other social sciences at NICHD!
2. Interdisciplinary and longitudinal approaches are crucial for successfully studying how major disasters affect health and development.
3. We look forward to sharing with you new results from our set of studies as they come in.
List of Relevant Grants

- Demographic & Health Disparities in Recovery from Hurricane Katrina: KATRINA@10 (P01 HD082032), Mark VanLandingham-Contact (Tulane), David Abramson (NYU), and Mary C. Waters (Harvard)
  - NIA Alzheimer’s Disease supplement for NIH grants that are not focused on Alzheimer’s disease (NOT-AG-18-008): 3P01HD082032-04S1 (FY2018)
  - ORWH Health of Women of Understudied, Underrepresented & Underreported (U3) Populations supplement: 3P01HD082032-04S2 (FY2018)
- Health Impacts of Hurricane Katrina on Vietnamese-American New Orleanians (R21 HD057609), Mark VanLandingham (Tulane)
- Survey of New Orleans Residents Displaced by Hurricane Katrina (R01 HD05910), Mark VanLandingham (Tulane)
Looking forward to your comments, questions, and suggestions.

Thank you!

https://sph.tulane.edu/katrina10