Climate Change and Resulting Floods: Using Social Capital to Strengthen Community Resilience in Eastwick, Philadelphia a known floodplain

Natasha Bagwe, MD, MPH
*Jefferson College of Population Health, Thomas Jefferson University, natasha.bagwe@jefferson.edu*

Richard Pepino, PhD, MSS
*University of Pennsylvania*

Erin Johnson, MPH, MSN, RN
*Drexel University*

Julie Becker, PhD, MPH
*University of the Sciences*

Follow this and additional works at: [http://jdc.jefferson.edu/jcphposters](http://jdc.jefferson.edu/jcphposters)

Part of the [Public Health Education and Promotion Commons](http://jdc.jefferson.edu/jcphposters)

Let us know how access to this document benefits you

**Recommended Citation**


[http://jdc.jefferson.edu/jcphposters/13](http://jdc.jefferson.edu/jcphposters/13)
**Background**

- Climate change will produce intense weather events like increased precipitation and flooding.
- Based on climate projections, Philadelphia will be hotter and wetter, and will experience more frequent and intense weather events (OOS, 2016).
- Floods are the second most common hazards in our city (OEM, 2017).
- Vulnerable population such as children, people of color, elderly population and people with disability are severely impacted by climate change.

**Social Capital Definition and Methods**

- Social capital consists of three components bonding, bridging, linking to services.
- Interdisciplinary approach.
- Built on trust, reciprocity, shared interest and collective action among community members.
- Increase community resilience.
- Faster recovery from disasters.

**Methods**

- 20 African American participants were recruited for this study aged **65 years and above**, living in Eastwick for more than 5 years through a method of snowball sampling.
- Eastwick Disaster Impact Questionnaire (DIQ), a non-valid instrumental tool was developed for this study.
- Door to door survey administration.

**Key findings**

**Conclusion and Future Public Health Implication**

- Eastwick will remain as a vulnerable community.
- Community perceives that the current FEMA flood plain maps are outdated.
- People are highly concerned and show increased levels of stress.
- Educating and building awareness about negative impacts of climate change among vulnerable population is key (bridging and linking).
- Establishing an updated warning system (linking and bridging).
- Drafting and practicing local disaster evacuation plan is critical (bonding and bridging).

**Acknowledgments**

Daniel Aldrich, PhD, Northeastern University.
Mark Keim, MD, MBA, DisasterDoc.org.