



Racism as a Contributor to Allostatic Load: Explaining Cardiovascular Health Disparities among African Americans



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Background

2011 county health reports mortality rates of heart disease were 1.8 times higher among African Americans (AA) in southeastern San Diego (SESD), compared to San Diego¹. These cardiovascular disease (CVD) disparities may be due to allostatic load (AL), the 'wear and tear' on the body after exposure to excessive or chronic stress. Compared to Caucasians, AAs have higher allostatic loads; and AA women have higher allostatic loads, compared to AAm².

Racism's contribution to racial differences in AL:
Everyday Discrimination → Experience of Anger → Decreased Sleep Quality → Increased Allostatic Load³

Objectives

To determine the relationship between racism, its perceived stress as a contributor to AL, and prevalence of CVD and CVD risk factors among AAs in San Diego, CA

Methods

Design: Community based participatory research with cross sectional study design.

Study Population: Adults at least 40 years of age who self-identify as African, African American, Afro-Caribbean American, Black American, Black, or of the African Diaspora.

Target population: 100 participants

Recruitment:

Community Organizations
Eg: San Diego Black Health Associates

Faith-Based Organizations
Eg: United African American Ministries Action Council

Community Health Care Providers
Eg: Multicultural Medical Group; Molina HealthCare

Survey: A single comprehensive self-administered survey will be distributed to study participants, which includes demographic information, cardiovascular medical history, cardiovascular risk factors, and exposure to stress from racism and adverse childhood experiences.

Statistical Analysis: The occurrence of disease will be plotted against the cumulative stress score and will be analyzed by logistic regression.

Results- Preliminary Survey Responses

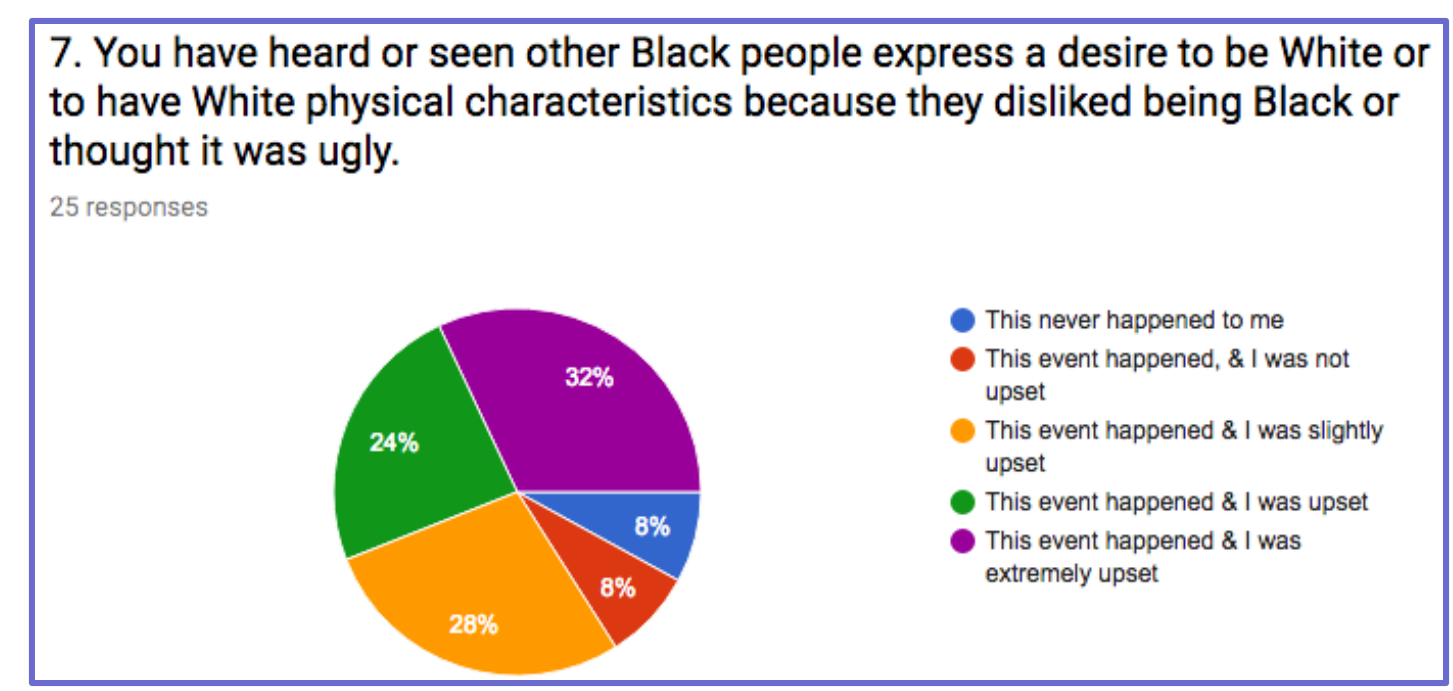
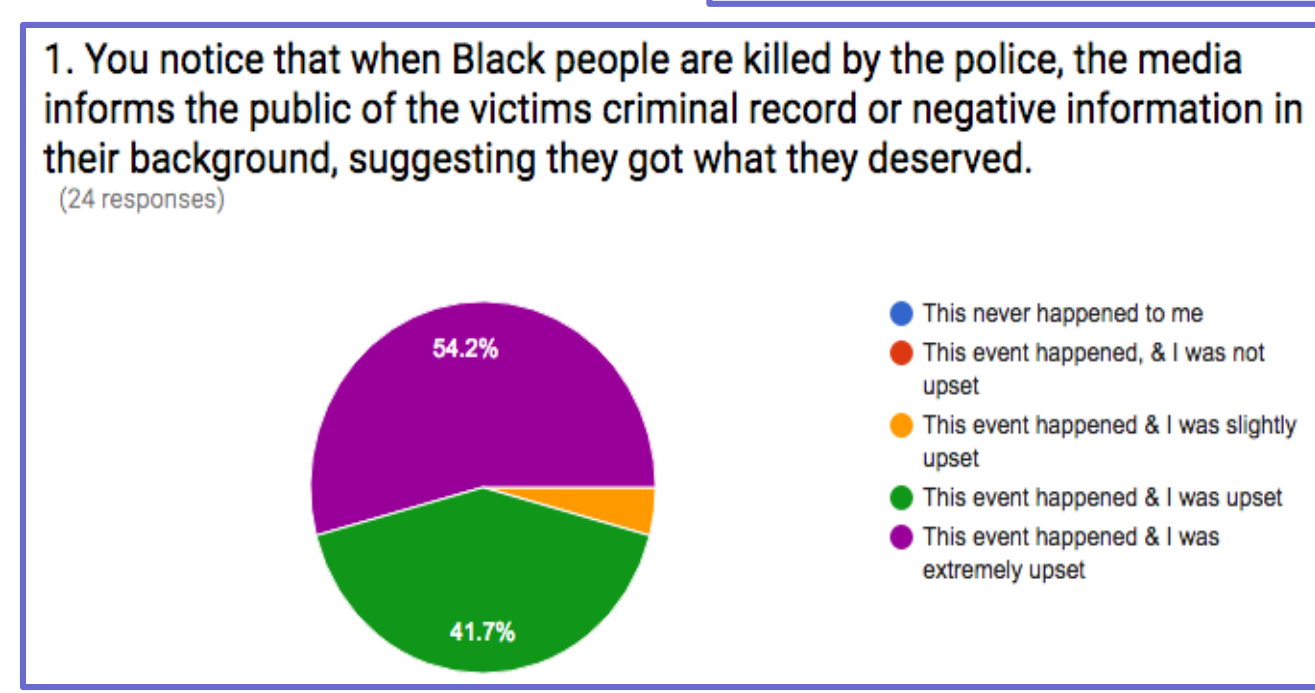
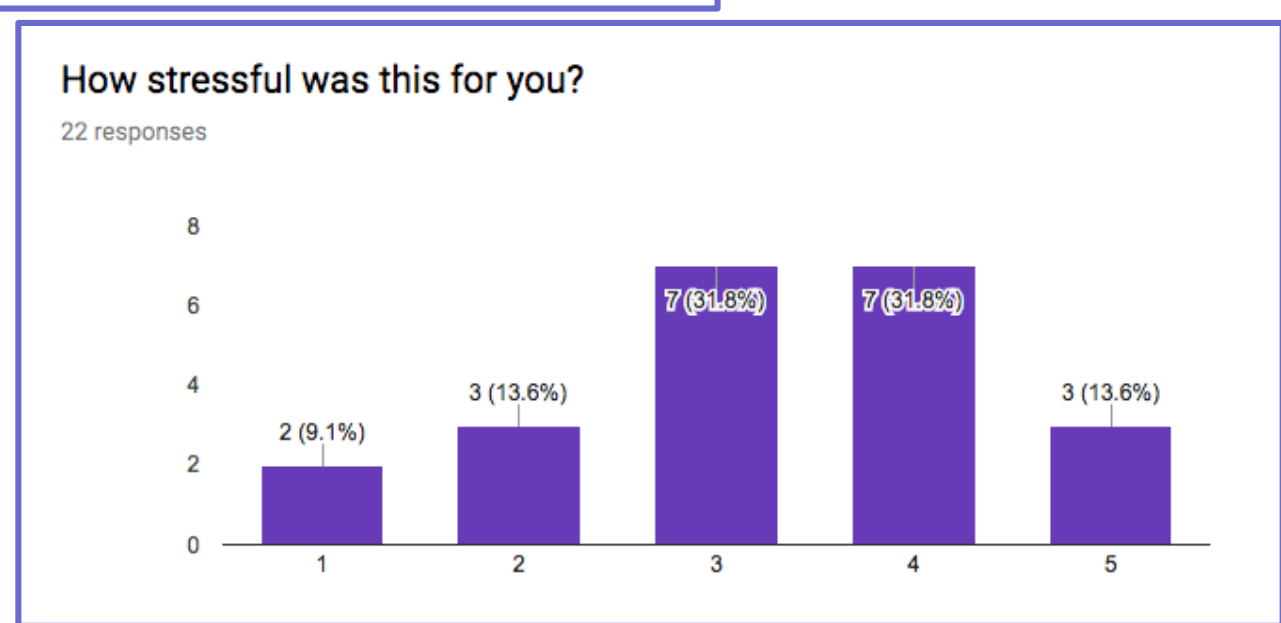
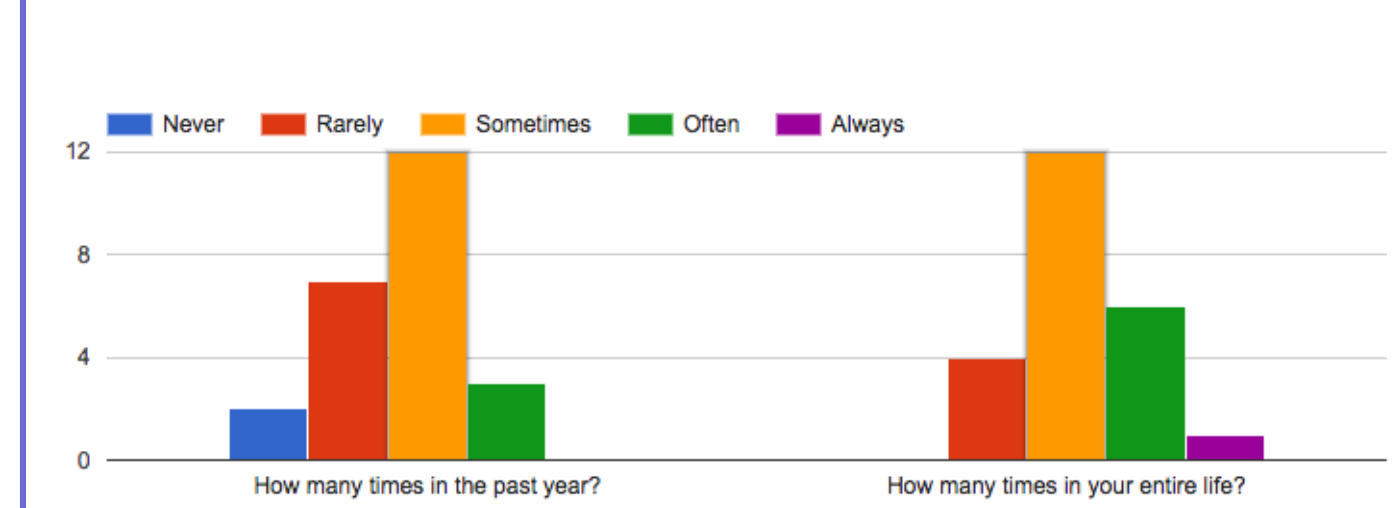
Participant Demographics:

- Gender: 40% men; 60% women
- Age: 40-77; average 60
- Skin Complexion: 25% Light; 50% Medium; 25% Dark
- Income: 50% \$25-49,999
- Insurance: 80% Private through employer
- Race of Provider: 4% PCPs are AA, 4% of specialists are AA

Health Profiles:

- Hypertension: 48%
- Stroke; TIA: 12%
- Coronary Intervention: 8%
- Myocardial Infarction: 4%
- Diabetes: 20%
- Kidney Disease: 8%
- Dyslipidemia: 33%

5. How many times have you been treated unfairly by people in healthcare providers (doctors, nurses, psychiatrists, case workers, dentists, school counselor, therapist, social workers, and others) because you are Black?



Results- Community Engagement

- Community partnerships for research involvement/ recruitment
- Jun 2015: SESD Community Advisory Committee
 - Aug 2015 SESD Cardiac Disparities Project Faith Leaders
 - Dec 2015 Multicultural Health Foundation (MHF) Town Hall: "Racism, Let the Cure Begin"; 500 attendees
 - Feb 2016; SD Chapter of NMA
 - Apr 2016 UCSD IRB Approval; study materials finalized
 - Jun 2016 SD BNA Quarterly Meeting
 - Aug 2016 SDBNA Annual Health Fair
 - Oct 2016: BAPAC Statewide Convention; SDBHA Resilience Event; Mt Erie Church Health Fair
 - March 2017: Pilot Survey edits, IRB re-approval
 - April 2017: MHF Data to Action Meeting
 - June 2017: Faith Based Leaders Meeting- Part 2



References

1. "San Diego County Demographics Profile; South Region 2011 Population Estimates." Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, County of San Diego, 2013.
2. Duru, O. Kenrik, Harawa, Nina T., Kermah, Dulcie, Norris, Keith C. "Allostatic Load Burden and Racial Disparities in Mortality." *Journal of National Medical Association* 104, no. 1-2 (2012): 89-95.
3. Tomfohr, L. M., Pung, M. A., & Dimsdale, J. E. "Mediators of the relationship between race and allostatic load in African and white Americans." *Health Psychology*, 35 no. 4. (2016). 322-332.

