

**Submission Id:** 5426

**Title**

*Family Emotional Climate: Risk or Resilience Factor for Pain Development Among Aging African Americans*

**Priority 1 (Research Category)**

Pain management

**Presenters**

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**Abstract**

Context: Family relationships are largely ignored in pain research, despite the unique importance of family for African Americans, who identify family support as critical to pain management while family stress is made worse by the same structural inequities that precipitate pain disparities. Pain research must understand how family stress and support (independently, and in tandem) convey risk or resilience for chronic pain. Objective: We estimated how family emotional climate conveys risk for chronic pain incidence among aging African Americans. Study Design/Analysis: Using logistic regression with bootstrapping, we tested whether family emotional climate predicted risk of pain development (excluding cancer pain) over 10 years of midlife among aging African Americans. Dataset: We used two longitudinal, epidemiological datasets: Midlife in the United States (MIDUS; completed 2004-06 and 2014-16) and the Health and Retirement Study (HRS; 2006/08 and 2016). Population Studied: Aging African Americans who reported on chronic pain incidence. Instrument: Family emotional climate was measured using validated, reliable measures of strain and support in intimate, family, and parent-child relationships used both in MIDUS and HRS. We tested the independent effect of each measure, tested strain and support simultaneously within each category of relationships, and averaged measures by valence across relationship types. Outcome Measures: All participants denied having chronic pain at baseline; participants who reported having chronic pain at follow-up waves were classified as developing chronic pain. Results: Among MIDUS participants, family support predicted a decreased risk of developing chronic pain 10 years later (OR = .63,  $p = .04$ ). Replication with HRS yielded unique findings: family strain (OR = 1.62,  $p = .004$ ) and parent-child strain (OR = 1.65,  $p = .005$ ) were linked to an increased risk of later chronic pain development. Among HRS, but not MIDUS, participants, averaging strain across relationship types predicted a 91.5% increased odds of developing chronic pain later in life. Conclusion: Family stress and support are modifiable risk and resilience pathways that may inform family-based pain management interventions for aging African Americans, though further research is needed to determine timing of pain development, the interference or severity of the pain that develops, and mechanisms of effect linking family factors to pain outcomes over time.