

How Do War and Stress Contribute to Subjective Age? An Analysis of Biological, Psychosocial and Life Course Stress Factors in the Vietnam Health and Aging Study

Reference:

Korinek, K., Brindle, E., Schmidt, J., Tran, T. K., Young, Y., & Zimmer, Z. (2020, April 22). How Do War and Stress Contribute to Subjective Age? An Analysis of Biological, Psychosocial and Life Course Stress Factors in the Vietnam Health and Aging Study. *PAA Biomarker Network Meeting*. Paper accepted for the meeting of the Population Association of America, Washington, D.C.

Abstract:

Background and Objectives: Evidence is mounting which demonstrates that subjective age is associated with a range of chronic diseases. Extending analyses to biological, sociological and psychosocial characteristics among older adults in low-middle income settings, with culturally and materially diverse contexts of aging, will enrich understanding of the underpinnings of subjective age. **Research Design and Methods** We utilize newly available social survey and biomarker data collected in 2018 in the Vietnam Health and Aging Study (VHAS) to analyze a series of biological, psychosocial, and sociodemographic correlates of subjective age. The VHAS sample (N=2,447) comprises older adults experiencing diverse early-midlife war-related stressors, recent life event stressors, and livelihood conditions, which jointly influence physical and mental health. Biomarker measurements include anthropometry (weight, height, middle-upper arm circumference and calf circumference), physical performance tests (peak expiratory flow and grip strength), HbA1c and hematology measures obtained through point-of-care assays of capillary blood. Key psychosocial covariates include recent psychological distress, life event stressors and war-related stressful events and living conditions. Models are adjusted for a series of demographic, socioeconomic, and self-reported health outcomes. Our outcome variable is a categorical assessment of subjective age (feeling older, younger, or approximately one's chronological age). **Results** Nearly half (45%) of the VHAS sample reports feeling older than their chronological age. In multinomial logistic regression analyses we find that Feeling Older than one's chronological age is more likely among subjects with middle-upper arm and calf circumference below established thresholds and low BMI. Hematocrit levels are inversely associated with subjective age. Among the strongest predictors of older subjective age are recent life event stress, high levels of psychological distress, multiple ADLs and comorbidities. **Discussion** Biomarkers of undernutrition, in particular mid-upper arm circumference, calf circumference, BMI and hematocrit levels, demonstrate significant associations with subjective age in this middle-income, post-conflict setting. The toll of difficult, post-conflict living conditions, manifest in psychological distress and recent life event stressors, lead many to feel older than their chronological age. Additional analyses are needed to illuminate the role of lifetime food insecurity and undernutrition in linking subjective age, chronic disease and mortality.