

matched healthy men without history of TBI. Temperature is assessed on a voxel-by-voxel basis throughout the entire brain. Cognitive ability is measured with the Repeatable Battery for the Assessment of Neuropsychological Status (RBANS). Information on pain, fatigue, and mood is collected through questionnaire. **RESULTS/ANTICIPATED RESULTS:** We anticipate that (1) average whole-brain temperature will be significantly higher in the TBI group than the healthy control group; (2) severity of (a) pain, (b) fatigue, and (c) mood symptoms will be correlated with brain temperature; and (3) severity of cognitive impairment will be correlated with brain temperature. **DISCUSSION/SIGNIFICANCE OF IMPACT:** If the hypotheses are confirmed, this tool will fill a need for objective tests of TBI pathology that can be used to improve diagnostic and treatment decisions and predict long-term functioning. This test would be the first completely noninvasive tool for detecting neuroinflammation, and will allow for safe and inexpensive longitudinal testing. Ultimately, we hope this noninvasive scanning technique will accurately track neuroinflammation in TBI, leading to more targeted and effective treatments.

2313

### A path perspective on bio-psycho-social predictors of health status in peripheral arterial disease

Nikhil Satchidanand, Jeffrey Fine and Gregory S. Cherr

**OBJECTIVES/SPECIFIC AIMS:** To explore associations among bio-psycho-social factors predictive of overall physical and mental health status as assessed using the SF-12 Health Survey. **METHODS/STUDY POPULATION:** Community-dwelling, male and female elders with peripheral arterial disease (PAD) were administered an assessment battery to identify factors associated with self-assessed physical and mental health status using the SF-12 Health Survey. The battery included an assessment of pain, depressive symptoms, perceived social support, perceived psychological stress, physical function, as well as selected demographic variables. **RESULTS/ANTICIPATED RESULTS:** Preliminary linear regression analyses have identified several factors predictive of physical and mental health status including depressive symptoms, pain, perceived stress, and physical function. A more in-depth examination using path analysis is anticipated to reveal important mediational associations, wherein physical function is a strong mediator between bio-psycho-social factors and overall physical and mental health status. **DISCUSSION/SIGNIFICANCE OF IMPACT:** Aging is often associated with a reduction in physical and mental well-being, frequently exacerbated by the development and progression of chronic disease. PAD is a common chronic condition that places significant burden on the older patient and their family. Identifying and developing a more in-depth understanding of the factors that impact health status in PAD is an important and timely objective. We anticipate that our findings will inform development of more targeted and effective intervention strategies we can employ to improve the quality of life among elders struggling to manage PAD.

2318

### “A clash of cultures”: Cervical cancer screening and Hispanic males

Bertha E. Flores, Martha Martinez, Lyda Arevalo-Flechas, Darpan Patel, Merlin Tobar and Deborah Parra-Medina

**OBJECTIVES/SPECIFIC AIMS:** Focus groups are being conducted to describe and identify barriers and/or facilitators to Hispanic males' health literacy, culture, and language related to cervical cancer prevention practices. **METHODS/STUDY POPULATION:** A purposive convenience sample was recruited to participate in focus group sessions with English or Spanish speaking Hispanic males 21 years of age and older. Groups were segmented by age (21–29, 30–39, 40–49, and 50–65), and language (English or Spanish). Focus group discussions ( $n=8$ ) were led by a bilingual/bicultural female researcher using a discussion guide that followed Zarcado *et al.* (2005) health literacy model 6 as related to their partners' cervical cancer screening and prevention practices. All sessions were audio-recorded and transcribed verbatim. Participants completed standardized questionnaires regarding demographic data and their health literacy. Qualitative content analysis was used for analyzing focus group interviews. **RESULTS/ANTICIPATED RESULTS:** Preliminary qualitative analysis shows the struggle Hispanic males' face accepting cervical cancer screening for their female partners. One participant reported that it was “a clash of cultures.” A “clash of cultures” was described as a constant struggle and acceptance between science, personal knowledge, and Hispanic cultural taboos. **DISCUSSION/SIGNIFICANCE OF IMPACT:** Hispanic male's health literacy, communication, language preferences, and cervical cancer risks, will further enhance the knowledge needed to design intervention measures for cancer prevention among Hispanics. Understanding the factors that contribute

to the unequal burden of cervical cancer incidence and mortality among Hispanic women in South Texas is critical to prevent cervical cancer among this population.

2329

### Psychosocial risk factors mental health symptoms, and intervention preferences of Latino immigrant parents presenting to a pediatric clinic

Rheanna Platt and Elisabet Arribas-Ibar

**OBJECTIVES/SPECIFIC AIMS:** (1) To assess the prevalence of mental health symptomatology (depressive symptoms, anxiety symptoms, PTSD symptoms, and problematic alcohol use) and psychosocial risk factors for mental health disorders (low social support, immigration stress, acculturation, and marital/partner discord), and their association with immigration status, health care access and contextual risk factors in Spanish-speaking parents of young children (ages 0–5) who attended a well-child visit. (2) To explore acceptability of screening for and discussing parental distress in the pediatric primary care setting, and parental acceptability of a group well-visit format to address both psychosocial risk factors and mental health symptoms in this population. **METHODS/STUDY POPULATION:** Latino immigrant parents ( $n=100$ ) of children ages 0–5 attending well-child visits at Johns Hopkins Bayview Children's Medical Practice were surveyed between October 2015 and February 2016. The verbally administered survey included the Woman Abuse Screening Tool (WAST), AUDIT-C, Primary Care Post-Traumatic Stress Disorder (PC-PTSD) Screener, California Health Interview Survey (CHIS), National Latino and Asian American Study (NLAAS), Appraisal Support Subscale from Interpersonal Support Evaluation List (ISEL), Personal Health Questionnaire Depression Scale (PHQ-8), and Generalized Anxiety Disorder Scale (GAD-2). These questionnaires have been used in large regional or national surveys and most have been validated with US Latino populations. Positive screens were defined as PHQ-8 > 5 (mild depression or greater), GAD-2 > 3, AUDIT-C > 3 for women and > 4 for men, and PC-PTSD > 3. Descriptive information and comparisons were obtained by  $\chi^2$  and Student *t*-test. Study protocol will allow review of children's pediatric records ( $n=100$ ). From this sample, parents were separately recruited to participate in in-depth interviews ( $n=11$  of 20 planned have been completed) further exploring both sources of parental distress, acceptability of screening for parental mental health symptoms in the primary care pediatric setting, and acceptability of a potential group-based well-visit model in the pediatric setting. **RESULTS/ANTICIPATED RESULTS:** Survey participants were 93.0% women, and predominantly < 35 years of age. The vast majority (94.0%) were undocumented, recently arrived (< 15 years ago) and reported poor or very poor English proficiency (75.0%). Most (84.7%) reported living with a partner or spouse (84.7%), and 58% reported partner relationship strain. In all, 71% reported poor social support. The prevalence of “screen positive” mental health symptoms was highest for depression (55%) and PTSD (35%), followed by anxiety (29%) and alcohol risk use (25%). Having depression was significantly higher (68.4%) ( $p < 0.02$ ) in participants with less education (< 6 grade). Partner relationship strain was associated with a higher prevalence of depressive symptoms (59.3%) ( $p < 0.03$ ). Immigration stress (feeling guilty for leaving family and friends) was also significantly associated with depressive symptoms (58.1%) and PTSD (43.5%) ( $p < 0.03$ ). More than half of the participants (60.0%) with depression were not covered by any health insurance and 56.3% of those with depression reported not having been seen by a health care provider in the past 12 months. A high prevalence of symptoms was found in those with poor appraised social support: alcohol risk use (76.0%), depression (69.1%), anxiety (69.0%), and PTSD (68.6%). Among participants, those aged < 30 years old and those with more children reported poorer appraised social support. Data from child medical records (including BMI, presence of feeding problems, referrals for social work, or mental health services) has been extracted but not yet linked to parent survey or interview results. Preliminary review of In Depth Interviews suggests that the most common reported source of stress among participants was related to finances, followed by documentation/legal status difficulties, access to childcare, and limited English proficiency. Some mothers also mentioned interpersonal violence and lack of access to healthcare as stressors. All mothers expressed an interest in a pediatric primary care based parent focused the majority of which indicated that a group based intervention would be acceptable, some mothers indicated they preferred a one-to-one intervention if mental health were to be discussed. Mothers seem preferential to social worker-led interventions compared with pediatrician-led, but most mothers were indifferent. Finally, mothers expressed low support from the Latino community in Baltimore. **DISCUSSION/SIGNIFICANCE OF IMPACT:** Results from this study suggest that this population of parents is experiencing a relatively high rate of mental health symptoms, low perceived social support, and limited access to their own source of care. This suggests that an intervention delivered within a primary care pediatric setting would have the potential to reach parents who might not otherwise interact with