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summit brought together almost 200 individuals representing 82 local organizations to share ideas and evoke collaboration around decreasing health disparities. Attendees learned about programs within and outside of their communities and volunteered for task forces to propel the community forward. Currently, we have members committed to further this work through Action Teams within the sectors of Physical Activity, Healthy Food Access and Family and Community Engagement. DISCUSSION/SIGNIFICANCE OF IMPACT: Convening individuals from many layers of the community helps to ensure discussions are representative of the overall community voice. It is vital to facilitate effective collaboration that includes networking, identifying assets and areas of improvement, brainstorming solutions and integrating research and best practices to improve the health of a community.

2117

## Parenting, anxiety, and adaptive function in children with chromosome 22qll.2 deletion syndrome Kathleen Angkustsiri, Tony J. Simon and Paul D. Hastings

OBJECTIVES/SPECIFIC AIMS: Chromosome 22q I I.2 deletion syndrome (22q) has a prevalence almost as common as Down syndrome. 22q is well known for medical complications, including congenital heart disease and immune dysfunction. However, children with 22q also have borderline cognitive abilities, are at high risk for ADHD and anxiety, and have poor independent living skills (adaptive function). Parenting is one modifiable factor that has been found in typically developing populations to promote independent functioning and protect against the development of anxiety disorders. This study investigates the associations between parenting, anxiety, and adaptive functioning in 22q. METHODS/STUDY POPULATION: Parent-child (ages 4-11) dyads participated in an ongoing study involving observed parenting during challenging tasks plus questionnaires of parenting, child anxiety, and child functioning. In total, 52 dyads [22q = 25; typical development (TD) = 27] have enrolled to date. Parents completed questionnaires, including the Parenting Styles and Dimensions Questionnaire (PSDQ), Spence Children's Anxiety Scale, and Adaptive Behavior Assessment System for Children (ABAS-II). PSDQ dimensions of interest included Parental Psychological Control (PPC: the management of child behavior through the manipulation of emotions, expectations, and independence), Authoritative, Authoritarian, and Permissive, and the subscales of these broad dimensions. Scores were compared using t-tests and multiple regression models were used to investigate the relationships between 1-parenting and anxiety and 2-parenting and adaptive function. RESULTS/ANTICIPATED RESULTS: Mean age was 7.8+2.1 years. Full Scale IQ (TD: 112.3 vs. 22q: 82; p < 0.001) and ABAS-II Global Adaptive Composite (TD: 102.7 vs. 22q: 69.2; p < 0.001) were significantly higher in the TD group. Parents in the 22q group reported higher levels of PSDQ PPC (22q: 2.3 vs. TD: 2.1; p = 0.06), specifically overprotection (22q: 3.7 vs. TD: 3.3; p = 0.04), and lower Authoritative parenting (22q: 4.1 vs. TD: 4.4; p = 0.03), across the subscales. There were no differences in Authoritarian or Permissive parenting. Children with 22q had higher Spence Total Anxiety scores (22q: 62.5 vs. TD: 47.4; p < 0.001). Selfreported PPC and group ( $R^2 = 0.3$ ,  $F_{3,48} = 8.1$ , p < 0.001) predicted child anxiety with a main effect of PPC ( $\beta$  = 16, p = 0.02). Group tended to moderate the association between PPC and anxiety ( $\beta = -17.5, p < 0.10$ ), with PPC predicting anxiety for the 22q group (r = 0.35, p < 0.09), but not the TD group (r = -0.08, ns). At this time, a relationship between PPC and child ABAS-II GAC in 22q (r = -0.14; p = 0.5) is not identified. DISCUSSION/SIGNIFICANCE OF IMPACT: Children with 22q are at high risk for anxiety and poor adaptive outcomes. These results suggest that parents of children with 22q use higher levels of PPC, which is correlated with increased child anxiety. These analyses also provide support for parenting interventions to improve anxiety in children with 22q and possibly mitigate the serious mental health risk in this population.

2135

## A novel treatment delivery of acceptance and commitment therapy for chronic pain in an integrated primary care setting

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OBJECTIVES/SPECIFIC AIMS: This study seeks to test the feasibility and effectiveness of a brief acceptance and commitment therapy (ACT) treatment for chronic pain patients in a primary care clinic METHODS/STUDY

POPULATION: Primary care patients aged 18 years and older with at least 1 pain condition for 12 weeks or more in duration will be recruited. Patients will be randomized into (a) ACT intervention or (b) control group. Participants in the ACT arm will attend I individual visit with an integrated behavioral health provider, followed by 3 weekly ACT classes and a booster class 2 months later. Control group will receive enhanced primary care that includes patient education handouts informed by cognitive behavioral science. Data analysis will include I-way analysis of covariance (ANCOVA), multiple regression with bootstrapping. RESULTS/ANTICIPATED RESULTS: The overall hypothesis is that brief ACT treatment reduces physical disability, improves functioning, and reduces medication misuse in chronic pain patients when delivered by an integrated behavioral health provider in primary care. In addition, it is anticipated that improvements in patient functioning will be mediated by patient change in pain acceptance and patient engagement in value-consistent behaviors. DISCUSSION/SIGNIFICANCE OF IMPACT: This pilot study will establish preliminary data about the effectiveness of addressing chronic pain in a generalizable integrated primary care setting. Data will help support a larger trial in the future. Findings have potential to transform the way chronic pain is currently managed in primary care settings, with results that could decrease disability and improve functioning among patients suffering from chronic pain.

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## What is the role of race and ethnicity in the development of thionamide-induced neutropenia?

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OBJECTIVES/SPECIFIC AIMS: Thionamides are anti-thyroid drugs (ATD) that are commonly used to treat autonomous thyrotoxicosis. Although efficacious, these medications carry a risk of neutropenia or agranulocytosis in a small but finite proportion of the patients who receive them. Some risk factors for thionamide-induced neutropenia have been identified, including body mass index (BMI) and dose, but the role of race and ethnicity in the pathogenesis of this potentially life-threatening side effect is not known. We hypothesize that there will be no effect of race or ethnicity on the change in absolute neutrophil count (ANC) following initiation of thionamide therapy among adult patients with thyrotoxicosis. METHODS/STUDY POPULATION: Data from the electronic medical record at UNM HSC were obtained using a standard database query for the years 2000-2016. Inclusion criteria were the prescription of an ATD, an ANC recorded within 30 days of initiating ATD therapy (pre-ATD), and an ANC recorded between 75 and 365 days after starting an ANC (post-ATD). Patients taking other agents known to cause neutropenia and agranulocytosis, such as clozapine, allopurinol, or chemotherapy, were excluded. Patients were assigned to racial and ethnic groups as follows: Hispanic, non-Hispanic Caucasian (NHC), native American, Black, and Asian. The post-ATD ANC was defined as the nadir ANC observed after the ATD was started. "Delta ANC" was defined as [(post-ATD ANC) - (pre-ATD ANC)]. ANOVA analysis with Bonferroni-adjusted post-hoc testing was performed to examine differences in the mean changes of ANC across ethnic groups. RESULTS/ANTICIPATED RESULTS: In total, 123 adult patients met inclusion and exclusion criteria and were included in the analysis. No significant difference was found between any of the racial groups with regard to age, sex, BMI, pre-ATD ANC, or the pre-ATD to post-ATD ANC interval. The native American group showed a significantly greater post-ATD ANC (not shown) and Delta-ANC as compared with the other groups. Delta ANC Hispanic =  $-1.4 \pm 3.3$ , Caucasian =  $-0.6 \pm 3.3$ , Black = -0.9 $\pm 4.1$ , Asian =  $-3.8 \pm 4.8$ , native American =  $3.6 \pm 5.1$  (all units per mm<sup>3</sup>; p < 0.001). DISCUSSION/SIGNIFICANCE OF IMPACT: In this cohort of New Mexicans with thyrotoxicosis, native American race was protective against thionamide-induced neutropenia.

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## Relationships between medical complexity factors and medication confidence and adherence among older Singaporean adults

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OBJECTIVES/SPECIFIC AIMS: To investigate whether medical complexity (indicated by multiple providers or healthcare visits) is associated with lower levels of confidence in medication use and lower medication adherence METHODS/STUDY POPULATION: Data on socio-demographics, health encounters, health status, and health attitudes and behaviors from a nationally representative sample of 1575 older Singaporean adults were utilized. The