and older) had to have fluency in written and spoken English and access to a computer or smartphone. Qualitative interviewers utilized an interview guide to conduct individual participant interviews. Interviews were audio-recorded and transcribed verbatim. Thematic analysis was used to analyze data using a phenomenological approach to explore how a personal cancer diagnosis impacted social connectedness. Qualitative data related to social connectedness (corresponding to code "Relationships and Support") are presented. RESULTS/ANTICIPATED RESULTS: Three themes emerged through thematic analysis: (1) AYACS experience substantial heterogeneity related to social support needs; (2) AYACS leverage multiple relationships and resources when seeking support after a personal cancer diagnosis; (3) AYACS' individual experiences were unique in that some noted positive changes, whereas others noted negative changes in relationships within social networks, specifically with peers. DISCUSSION/SIGNIFICANCE OF IMPACT: AYACS experience various social support needs, and leverage multiple relationships when seeking social support. These translational findings create a foundation to develop AYACS social programming, foster peer relationships, and incorporate social science methods to aid intervention development to strengthen AYACS' social connectedness.

256
Identifying causes of parenting stress among postpartum mothers receiving medication for opioid use disorder (MOUD)

Mollee Steely Smith, Michael Cucciare, Melissa Zielinski and Nicola Edge
University of Arkansas for Medical Sciences

OBJECTIVES/GOALS: Summarize literature on parenting stress and treatment outcomes among postpartum women with opioid use disorder (OUD). Describe the causes of parenting stress identified by postpartum women who received medication for OUD (MOUD) and service providers. Discuss recommendations for parenting support services for postpartum women receiving MOUD in outpatient treatment settings. METHODS/STUDY POPULATION: We will conduct focus groups with postpartum women who received MOUD up to one-year after childbirth (2 groups; n = 10) and service providers (e.g., obstetrics, psychiatry, pediatrics, primary care; 2 groups; n = 10) to identify causes of and contributors to parenting stress to inform the adaptation of a parenting intervention for postpartum women receiving MOUD in an outpatient clinic setting. Participants will be recruited via flyers, email, and social media reach-outs, clinic staff and patient group meetings, and community-based outreach methods. Participants will be compensated for their participation. Focus groups will be audio-recorded and transcribed. Data will be analyzed via rapid analytic procedures using a summary template matrix. RESULTS/ANTICIPATED RESULTS: We will use parenting-related stressors identified by mothers with substance use disorders in previous research to guide our interview questions. We expect to hear participants speak about their knowledge and experiences with stigma, guilt and shame, mental health symptoms, neonatal opioid withdrawal or neonatal opioid withdrawal syndrome (NOWS), fear of being reported to child protective services, and difficulties with mother–infant bonding and attachment. We will also ask participants about structural barriers that are known to increase parenting stress, such as housing instability, financial strain, and availability and cost of childcare. We will also report on new themes that emerge from the data that are shown to increase stress, challenge sobriety, and hinder continued engagement in the treatment. DISCUSSION/SIGNIFICANCE OF IMPACT: Discontinuation of MOUD in the postpartum period is high and can lead to opioid recurrence and overdose. Outpatient treatment programs who offer psychiatric and behavioral health care, and parenting programs that target contributors of early postpartum parenting stress could improve health and MOUD treatment outcomes for mothers with OUD.

257
Assessing the association between experienced and anticipated discrimination with objective physical activity among SGM adults using an unsupervised machine learning approach*

Veneros David Lopez[1], Hasso Ensari Ipek[2], Yashika Sharma[3], Kasey Jackman[4] and Billy A. Caceres[4]
[1]Columbia University Irving Medical Center; [2]Plattner Institute for Digital Health, Icahn School of Medicine at Mount Sinai; [3]University of Connecticut and [4]Columbia University

OBJECTIVES/GOALS: Using k-means clustering, we aimed to identify whether clusters characterized by greater exposure to minority stressors (e.g., experienced/anticipated discrimination) were associated with lower moderate-vigorous physical activity (MVPA) and higher sedentary behavior among sexual and gender minority (SGM; e.g., lesbian/gay, bisexual, transgender) adults. METHODS/STUDY POPULATION: SGM adults face higher risks of inadequate PA due to exposure to minority stressors, which may influence their willingness and ability to engage in PA. An online sample of SGM adults completed daily surveys about experienced and anticipated discrimination and wore wrist accelerometers for 28 days to objectively measure PA. We used k-means clustering to identify clusters based on reports of experienced and anticipated discrimination. We determined the optimal number of clusters using established partition criteria and ran linear regression models (adjusted for demographic factors) to examine the associations of minority stress clusters with MVPA and sedentary time. RESULTS/ANTICIPATED RESULTS: Among 42 SGM adults (mean age 27.0±7.7 years) with 1133 person-days of accelerometry data, we identified four minority stress clusters: low anticipated/low experienced (LALE; reference group), low anticipated/high experienced (LAHE); high anticipated/low experienced (HALE), and high anticipated/high experienced discrimination (HAHE). Participants in the HALE cluster (n = 12) engaged in 202 fewer minutes of MVPA than those in the LALE cluster (n = 7). Participants in the LAHE cluster (n = 10) had 123 fewer minutes of vigorous PA than those in the LALE cluster. No differences were identified for sedentary time. DISCUSSION/SIGNIFICANCE OF IMPACT: This is the first study to examine the association of minority stressors with objective PA among SGM adults. Participants in the HALE/LAHE clusters had lower PA than those with low levels of experienced and anticipated discrimination. Interventions to improve PA among SGM adults must target reduction of minority stressors.