

Poster Session 2 Monday, March 13, 2023 5:45 pm – 6:45 pm

<u>Board 201</u>

Association between race/ethnicity and weight management behaviors among US adults: findings from 2017-2020 National Health and Nutrition Examination (NHANES) Survey

Osuji, Chimuanya, P; Uyamasi, Kido; Tykeara, Mims; Joseph-Williams, Elizabeth; Jones-McKyer Lisako; Tasnim, Samia

Background: Obesity is a key risk factor for many chronic diseases, and the existent disparities in its prevalence across racial/ethnic groups in the United States have worsened overtime. Differences in weight loss intention, and the use of weight-control methods have been linked to sociocultural norms related to weight and body image.

Methods: Data from the 2017-2020 National Health and Nutrition Examination (NHANES) Survey were used. The study restricted participants to those between 20 and 65 years old (n=6393). Descriptive statistics were used to illustrate racial/ethnic differences in weight loss strategies among participants who reported intention to lose weight and participants who reported intentional weight change. Multiple logistic regression models were used to assess the association between race/ethnicity and intention to lose weight, and intentional weight change.

Results: Among those who tried to lose weight, exercising was the most reported way to lose weight (Non-Hispanic Blacks, 71.7%; Other, 71.3; Hispanic, 62.9%; Non-Hispanic Whites, 64.2%). Among those whose weight changed intentionally, drinking a lot of water was the most reported way among Hispanics (68.7%) and Other races (70.8%), while eating less was most reported by Non-Hispanic Whites (65.7%), and exercising was most reported by Non-Hispanic Blacks (74.8%). Other races/ethnicities (Non-Hispanic Asian, multi-racial and others) were more likely than Non-Hispanic Whites to report intention to lose weight (adjusted odds ratio 1.41, 95% CI 1.04-1.92).

Conclusion: This study indicates a shift in the likelihood of weight loss intention and use of recommended weight loss strategies across racial/ethnic groups. Efforts should be targeted towards improving weight-loss intention and use of recommended weight-control practices among racial/ethnic minorities.

Board 202

The development of a scale assessing monkeypox knowledge: Results from a nationally representative sample of Americans

Walsh-Buhi, Eric R; Walsh-Buhi, Margaret L; Houghton, Rebecca

Purpose: This research developed and tested a scale assessing monkeypox knowledge in a national survey of U.S. adults (aged ≥18 years).

Methods: Address-based sampling (ABS) methods ensured full coverage of all households in the nation. N=1018 participants self-administered the Internet-based survey between September 16-26, 2022, including a 15-item scale, with knowledge items adapted from Sallam et al (https://doi.org/10.3390/medicina58070924) and Harapan et al

(https://doi.org/10.1080/20477724.2020.1743037). Possible responses included "yes," "no," and "I do not know," and were scored as correct=1, incorrect=-1, and "I do not know"=0. The scale sum represented the monkeypox knowledge score (theoretical range=-15-15, with a higher



score representing greater knowledge. We assessed psychometric characteristics and performed one-way ANOVAs examining mean score differences by demographic groups (e.g., gender, race/ethnicity, sexual orientation), applying sampling weights to all analyses.

Results: Score reliability was strong (α =.82). All items but one ("Diarrhea is one of the symptoms of monkeypox") had statistically significant point biserial correlations, indicating a correction between a correctly answered item and a higher knowledge score. The top three correctly answered items were "Monkeypox is present in the U.S." (86.2%), "There is a currently an outbreak of monkeypox in humans around the world" (71.2%), and "Only gay/bisexual men can get monkeypox" (68.9%). The three lowest scoring items were "Diarrhea is one of the symptoms of monkeypox" (4.5%), "Monkeypox has an average incubation period of 21 days" (11.7%), and "You can get monkeypox from your infected pet" (13.3%). Overall monkeypox knowledge was above the theoretical mean, but still low (M=5.71, SD=3.85). Differences in knowledge between sexual orientation, urbanicity, education, and household income groups were statistically significant overall.

Conclusions: Monkeypox knowledge was lowest among heterosexually-identified, rural, and low education/income respondents. These data may be used to tailor monkeypox risk/prevention (e.g., vaccination) interventions. This scale also shows promise for assessing monkeypox knowledge in other groups/settings.

Board 203

Monkeypox 2022: Fear, perceived susceptibility/severity, and vaccine intention in a nationally representative sample U.S. adults

Walsh-Buhi, Eric R; Walsh-Buhi, Margaret L; Houghton, Rebecca

Purpose: The purpose of this research was to examine vaccine intention, fear of monkeypox, and perceived susceptibility to and perceived severity of monkeypox in a national survey of U.S. adults (aged \geq 18 years).

Methods: Address-based sampling (ABS) methods were used to ensure full coverage of all households in the nation, reflecting the 2021 March Supplement of the Current Population Survey. Internet-based surveys were self-administered between September 16-26, 2022. N=1018 participants completed the survey. The survey included items, based partially on the Health Belief Model, assessing vaccine intention (1 item, with responses from 1 [Definitely not] to 5 [Definitely]), fear of monkeypox (7-item scale; α =.89; theoretical mean=7-35), perceived susceptibility to monkeypox (3-item scale; α =.85; theoretical mean=3-15), and perceived severity of monkeypox (4-item scale; α =.65; theoretical mean=4-20). Higher scores indicate greater fear, susceptibility, and severity. One-way ANOVAs were run to examine mean score differences by demographic groups (e.g., gender, race/ethnicity, sexual orientation). Sampling weights were applied to all analyses.

Results: Only 1.8% (n=18) of respondents reported having received the monkeypox vaccine. While monkeypox vaccine intention was low (M=2.09, SD =0.99), overall differences between racial/ethnic, sexual orientation, education, and household income groups were statistically significant. Fear of monkeypox was very low (M=13.13, SD=5.33), and there were overall statistically significant differences in both fear and perceived severity among gender, race/ethnicity, sexual orientation, education, and household income groups. While respondents



reported not feeling very susceptible to monkeypox (M=5.77, SD=2.50), they generally rated monkeypox as just above the theoretical mean in terms of severity (M=11.01, SD=2.85).

Conclusions: Overall, Americans' vaccination for monkeypox/vaccine intent was low. Gay/lesbian and racial/ethnic minority respondents felt more susceptible to and viewed monkeypox more severely, compared with heterosexual and White respondents, respectively. These data may be used to tailor risk and prevention (e.g., vaccination) interventions, as the current global monkeypox outbreak continues.

Board 204

Impact of Perceived Parental Alcohol Problems on Adolescent and Young Adult Females' Depressive Symptoms, Family Satisfaction, and Binge Drinking

Appleseth, Hannah, S; Croff, Julie, M.; Moyers, Susette, A.; Crockett-Barbera, Erica K.

Purpose: We assessed the relationship between perceived parental alcohol problems (PPAPs), depressive symptoms, past month binge drinking episodes, and family satisfaction among a sample of female adolescents and young adults. These analyses were conducted to better understand the impact of parental alcohol use on facets of young female health and behavior.

Methods: The cross-sectional data were collected at the baseline of a larger biometric study and included 135 females ages 15 to 24, (MAge = 19.24, SD = 2.62). Over half of the sample identified as White (56.3%, n = 76), 5.2% identified as Black (n = 7), 14.8% were American Indian or Alaska Native (n = 20), and 23.7% were Latina (n = 32). The Children of Alcoholics Scale 6-item (CAST-6) was used to measure participant perceptions of parental alcohol use. Outcome variables were measured by the Family Adaptability and Cohesion Evaluation Scale-IV (FACES-IV) family satisfaction subscale, the Center for Epidemiological Studies Depression Scale-Revised (CESD-R), and self-report of past month binge-drinking episodes. Hierarchical multiple regression analyses were used to allow for the predictor variable, PPAP, to be entered into the regression equation (at step 2) following the inclusion of the covariates of maternal education, paternal education, age, and race.

Results: Higher PPAP scores (measured by CAST scale) predicted increased levels of depressive symptoms (β = 0.23, t(128) = 2.86, p = .01), past-month binge drinking episodes (β = 0.18, t(128) = 2.15, p = .03, and decreased levels of family satisfaction (β = -0.23, t(128) = -2.74, p = .01).

Conclusion: Adolescent girls and young women are uniquely affected by parental alcohol use (Maxwell et al., 2022). Our findings emphasize the importance of continuing to investigate family factors in AUD prevention and treatment efforts specifically for young women—a historically underrepresented group in substance use research (Diehl et al., 2007).

Board 205

Exploring Perceived Need for Treatment among Hazardous Drinking Adults: Implications for Prospective Treatment Uptake

Montemayor, Benjamin, N.; Barry, Adam, E.; Russell, Alex, M.; Lin, Hsien-Chang; Ou, Tzung-Shiang; Massey, Phillip, M.

Purpose: Despite over 28 million Americans meeting the diagnostic criteria for an Alcohol Use Disorder (AUD), less than 10% of those with an AUD utilize treatment services. Although many



5:45 pm – 6:45 pm

adults with an AUD may recover without the use of formal treatment, less is known about the impact of intrapersonal determinants on perceived need for treatment among hazardous drinking adults. This study explored associations of perceived need for AUD treatment with hazardous drinking behavior, perceived behavioral control, and attitude regarding treatment effectiveness.

Methods: Adults (aged 18-55 years) with hazardous drinking behaviors (defined by having >=8 Alcohol Use Disorder Identification Test [AUDIT] score) who have never received treatment for their drinking behaviors completed an anonymous online questionnaire (n=499). Respondent's level of hazardous drinking behavior was evaluated by their personal AUDIT score. Respondents completed measures which assessed their AUDIT score, perceived behavioral control, attitude toward treatment, and perceived need for treatment. A multivariable logistic regression model was fitted to examine the associations of perceived need for treatment with AUDIT score, perceived behavioral control, and attitude regarding treatment effectiveness, adjusting for sociodemographic covariates.

Results: Our findings showed that only 23% of respondents perceived a need for treatment for their alcohol use. Statistically significant differences existed for AUDIT scores between those who did and did not perceive a need for alcohol treatment (p<.001). Moreover, respondents with higher AUDIT scores and favorable attitudes regarding treatment effectiveness were more likely to perceive a need for alcohol treatment (ORs=1.10, p<0.001; and OR=1.17, p<0.01, respectively).

Conclusions: Findings suggest enhancing attitudes regarding treatment effectiveness and recognition of AUD among adults who engage in hazardous drinking behaviors could enhance prospective treatment uptake. Future research could develop and test the efficacy of positive alcohol-related treatment content interventions (e.g., successful recovery journeys) on alcohol treatment seeking behaviors among adults with hazardous drinking behaviors.

Board 206

Exploring the Utility of Cannabis in Managing Symptoms of Chronic Conditions among non-Hispanic Black and Hispanic Men

Montemayor, Benjamin, N.; Merianos, Ashley, L.; Sherman, Ledric, D.; Jacobs, Wura; Smith, Matthew, L.

Purpose: Racially and ethnically diverse men experience chronic conditions at disproportionate rates. Yet, low medication compliance can adversely affect their treatment outcomes, and overall physical and mental health. Adults are increasingly using cannabis to manage symptoms of chronic conditions; however, less is known about motives of cannabis use among racially and ethnically diverse men with chronic conditions. Objective: This study assessed factors associated with recent cannabis use among non-Hispanic Black and Hispanic men with chronic conditions.

Methods: Data were analyzed from a national sample of 2,023 non-Hispanic Black and Hispanic adult men ages \geq 40 years diagnosed with \geq 1 chronic condition. Respondents anonymously completed an online questionnaire, which assessed self-reported chronic conditions, pastmonth cannabis frequency, and physical and mental health perceptions. Respondents reported on 19 potential chronic conditions, however, focal chronic conditions of interest included conditions where cannabis is commonly used for medicinal purposes: chronic pain,



depression/anxiety, arthritis/rheumatic disease, and cancer/cancer survivor. A multivariable logistic regression model was conducted while including sociodemographic covariates.

Results: The mean respondent age was 57 years old, 57% were non-Hispanic Black, and 22% reported recent cannabis use. Significantly larger proportions of men with chronic pain, depression/anxiety, and arthritis/rheumatic disease reported cannabis use (p<.001, respectively). While Hispanic men (adjusted odds ratio [AOR]=0.73, 95% confidence interval [CI]=0.58-0.93) and those who were older (AOR=0.96, 95%CI=0.95-0.97) were at decreased odds of using cannabis, respondents with greater physical (AOR=1.10, 95%CI=1.06-1.15) and mental (AOR=1.07, 95%CI=1.02-1.11) health problems, more chronic conditions (AOR=1.23, 95%CI=1.10-1.38), and who resided in states where cannabis is legalized for medicinal and/or recreational use (AOR=2.03, 95%CI=1.50-2.74) were at increased odds to use cannabis.

Conclusions: Cannabis use may be associated with physical and mental health symptoms among non-Hispanic Black and Hispanic men with chronic conditions. Discussions with healthcare providers concerning managing symptoms with cannabis may allow for improvements in treatment outcomes.

Board 207

An exploration of social injustice among young adults with Type-1 Diabetes from lowincome, racial/ethnic minority backgrounds using social needs as a predictor

Ngozi Nnoli; Pey-Jiuan Lee; Elizabeth Pyatak

Introduction: The objective of this study was to examine whether social needs could predict mental well-being (SF-12v2 mental component summary), diabetes-related quality of life (ADDQoL), and diabetes self-management (DSMQ) among young adults with type 1 diabetes (T1D). We hypothesized that the accumulation of social needs would significantly negatively impact the evaluated outcomes.

Methods: The participants were young adults (18-30 yrs) from the Resilient, Empowered, Active Living and Telehealth Diabetes study (REAL-T) who had T1D (n = 151). Multiple regression models were used to assess the significant contribution from the independent variable: social needs (SN), and covariate variables (race/ethnicity and parental education level) to the dependent variables: SF-12v2, ADD-QoL, and DSMQ while adjusting for the controlling variable (age).

Results: Data from 164 participants (24.4 years old; 54.3% Non-Hispanic White, 31.1% Hispanic, 14.6% Non-Hispanic Minority) were analyzed. The regression model revealed that more social needs predicted poorer mental well-being (r2 = 0.314, p = < 0.001), diabetes-related QoL(r2 = 0.146, p = 0.001), and diabetes self-management (r2 = 0.151, p < .001) while accounting for the covariate and controlling variables. Hispanic/Latinx participants had better diabetes self-management relative to other racial/ethnic groups ($\beta = 0.551$, r2 = 0.151, p < 0.05). No significant contributors were found among other variables.

Conclusion: Overall, social needs predicted decreased satisfaction with one's diabetes care, mental well-being, and diabetes-related QoL. The findings demonstrate the impact of social deprivation and marginalization using social needs as a proxy for socioeconomic status. The results support how low socioeconomic status could significantly impact young adults with T1D. Further investigation is needed among young adults from poor SES and minority racial/ethnic



backgrounds to explore the impacts of deprivation and marginalization on diabetes selfmanagement and mental well-being.

<u>Board 208</u>

Coping with Discrimination and Psychosocial Health Determinants in African Americans with Type 2 Diabetes

McLaurin, Natalie, N; Tabibi, Doonya, S; Wang, Tianyu; Alhalimi, Taha, A; Harrison, Louis; Lehrer, H Matthew; Tanaka, Hiro; Steinhardt, Mary, A

Purpose: This study assessed the factor structure and construct validity of the Coping with Discrimination Scale (CDS) among African American adults with type 2 diabetes (T2D).

Methods: African Americans with T2D (N=226, 61.2±11 years, 74% female) enrolled in the Texas Strength Through Resilience in Diabetes Education (TX STRIDE) clinical trial were administered the CDS and additional surveys assessing psychosocial health determinants (perceived stress, diabetes distress, depressive symptoms, resilience, social support, self-efficacy, spiritual coping). Factor analysis was conducted on the CDS to determine its factor structure, and internal consistency coefficients were reported for each factor. Pearson correlations of each CDS factor with psychosocial health determinants were used to examine construct validity.

Results: The factor analysis identified four factors: education/advocacy (α =.88), internalization (α =.82), maladaptation (α =.63), and detachment (α =.59). Education/advocacy was positively associated with resilience (r =.33, p <.001), social support (r =.18, p<.01), self-efficacy (r =.30, p<.001), and spiritual coping (r =.35, p<.001). Internalization was positively associated with perceived stress (r =.23, p<.001), diabetes distress (r =.21, p<.001), depressive symptoms (r =.22, p<.001), and spiritual coping (r =.23, p<.001). Maladaptation was positively associated with perceived stress (r =.22, p<.001), diabetes distress (r =.15, p<.05), and depressive symptoms (r =.19, p<.01). Detachment was positively associated with perceived stress (r =.15, p<.05), and depressive symptoms (r =.16, p<.05), and negatively associated with resilience (r = -.20, p<.01), social support (r = -.19, p<.01), and self-efficacy (r = -.18, p<.01).

Conclusion: This study provided evidence for a four-factor structure of the CDS among African American adults with T2D, with each factor exhibiting good internal consistency reliability. Each factor demonstrated significant associations with several relevant psychosocial determinants of health, including education/advocacy with more health-promoting determinants and internalization, maladaptation, and detachment with more health-diminishing determinants.

Board 209

Mixed-methods Evaluation, Refinement, and Dissemination of a Booster Seat Intervention

England, Kelli J.; Edwards, Ann L.; Gordon, Emily R.; Putnam, Emily L.; Dobyns, Taylor; Springer, Charles E.

Purpose: Booster seats reduce serious crash injury risk by 67% compared to seat belt use for 5-8 year-olds; yet over one-third of US children are prematurely transitioned to a seat belt. The purpose of this mixed-methods study was to assess parent perceptions of the 4-minute empirically supported "Boost 'em in the Back Seat" video in order to inform creation and dissemination of shorter versions of the video.



5:45 pm – 6:45 pm

Methods: Fifty-one parents were recruited for one of two study arms: virtual focus groups (3 groups, n=23) or an online survey (n=28). Parents viewed the existing video and offered insights for video revision. Qualitative data were analyzed using NVIVO software and common theme analysis, and descriptive survey data were analyzed using SPSS. Parents' perceptions and suggestions were examined to determine elements of the long video to cut while maintaining the persuasive effect. The team then worked with media partners to create and rerelease shorter versions of the video.

Results: Nearly half of parents (42.9%) were unaware of current booster recommendations. Thematic analysis revealed that parents found the storytelling approach of the video impactful. However, parents suggested shortening the video by excluding certain subject matter experts, shortening the introduction, and simplifying medical dialogue. Using this information, the team worked with JPIXX Productions to shorten the video. A 6-week digital media campaign was launched locally in August 2022 over numerous streaming, display, PPC, and social media platforms. The campaign delivered 2.5 million impressions, 363,967 video views, and outperformed typical industry standards with some platforms delivering a 96% video completion rate and 16% click through rate to website. Website traffic increased 989% and the videos also had 109,402 organic (unpaid) views during the campaign period.

Conclusions: Parent feedback was helpful in modifying an evidence-based booster seat intervention for rerelease in a modern digital media campaign.

Board 210

Short-term impacts of physical activity on mood and well-being among adults with T1D

Pham, Loree, T; Hernandez, Ray; Spruijt-Metz, Donna; Gonzalez, Jeffrey, S; Pyatak, Elizabeth, А

Background: Few studies have investigated the short-term, momentary relationships between physical activity (PA) and well-being. This study focuses on investigating the dynamic relationships between PA and affective well-being in adults with T1D, while also investigating the potential effects of activity type and activity importance.

Methods: Participants completed daily ecological momentary assessment surveys regarding current activities (activity type and activity importance) and affective well-being states (e.g., happy, stressed, excited, anxious) via mobile phone six times per day over 14 days. Time spent in vigorous PA, moderate PA, light PA, and sedentary was measured using wrist-worn accelerometers (Actigraph wGT3X-BT) worn continuously for 14 consecutive days. Between and within-person correlations between PA, well-being, and activity type were calculated from the three-hour time period preceding the survey prompt. Mixed effects models were run to determine if relationships between physical activity and well-being were significant after adjusting for activity type and activity importance.

Results: Overall, 8,639 data points from 122 adults (41±15 yrs, 56% female, 38% Latinx, 35% White, 11% Black, 12% multiethnic/other) across 1,812 days were analyzed. Within-person, increased sedentary time was associated with less positive affect (r = -0.11, p < 0.001), while more PA at any intensity was associated with greater positive affect (r = 0.09 to 0.10) and reduced fatigue (r = -0.05 to -0.07), three hours later (p < 0.001). Between-person, however, increased light PA was associated with increased stress (r = 0.21, p = 0.023) and diabetes distress (r = 0.30, p < 0.001).



Conclusions: This study provides evidence that positive affect, fatigue, stress, and diabetes distress is associated with previous PA, regardless of the type of activity that people engaged in. These findings have implications for the timing of short-term interventions, such as just-in-time adaptive intervention approaches.

Board 211

Piloting and Expanding a Food Resource Navigation Model: Using community resource navigators to address food security in a community health setting

Koob, Caitlin; Stuenkel, Mackenzie; Smolens, Nicole; Richardson, Emily; Amati, Blakely; Eicken, Meredith; Sease, Kerry

Purpose: In South Carolina, 12.6% of households present as food insecure. Food assistance programs can alleviate food insecurity, yet connection to resources can present additional challenges for families. The Food Resource Navigation Model (FRNM) was designed to address determinants underlying food insecurity and resource connection, using a trained navigator. The purpose of this study was to increase early identification of food insecurity and to support family's connection to services through the FRNM and a streamlined referral support process.

Methods: A pilot study conducted at two pediatric clinics implemented routine food insecurity screenings at child wellness visits via a pediatric health and wellness survey. Providers referred families experiencing food insecurity to a Food Resource Navigator (FRN). FRNs follow an active referral protocol, contacting families, conducting the validated, 2-item Hunger Vital Signs screener, and provided customized lists of resources. FRNs followed-up at 1- and 6-months to document food security status, resource utilization, and barriers to connection.

Results: During the pilot study, 80 patients were referred to a FRN from November 2021 to April 2022, and 64% were successfully reached. One-month follow-up survey data displayed a 48% increase in household food security. Patients identified lack of transportation, time, and understanding of how to access resources as common barriers to connection.

To develop a comprehensive evaluation of connection rates and characteristics of food insecurity, a streamlined process was implemented within the FRNM. This enhanced model collects additional demographic data and is implemented in over 40 clinics, reaching 208 patients to date. Connection rate and FRN reach are now evaluated based on patient characteristics to explore inequities within the model.

Conclusions: Navigation data provides insight into health behavior trends of food insecure households and referral completion characteristics. A patient satisfaction survey is being piloted to inform a dynamic, patient-centric service to address food insecurity.

Board 212

Examining Social-Structural Reasons for Not Attending Postpartum Care Visits Among Indigenous Patients

Shreffler, Karina M.; Jones, Emily J.; Dwyer, Kathleen A.; Finnell, Karla; Joachims, Christine N.

Purpose: Postpartum care is critical for maternal health, especially for the prevention of postbirth maternal mortality. A substantial proportion of women do not attend any postpartum care visits. The current examines postpartum care visits among a clinic-based sample of low-income and racially-diverse women recruited at their first prenatal visit in Tulsa, OK.



Methods: The sample for this study include 125 women (aged 16-38; 40% White; 29% Black; 18% Indigenous; 13% Hispanic) who remained in the study through six months postpartum. Logistic regression analysis was conducted to examine the odds of attending postpartum care visits, controlling for sociodemographic variables including race/ethnicity, union status, age, parity, and economic hardship. Descriptive and post-hoc tests were then used to examine social-structural differences between Indigenous women who attended postpartum visits vs. those who did not attend.

Results: Overall, 76.8% of the sample attended at least one postpartum care appointment within six months of giving birth. Indigenous participants were 75% less likely to attend their postpartum care appointment than non-Hispanic white participants. The most common reasons given for missing appointments included not having insurance coverage, not believing that a follow up appointment was necessary, being too busy, and not having transportation. Post-hoc ANOVA tests revealed that those living with the father of their baby had significantly higher rates of attendance at postpartum visits.

Conclusions: The findings from this study indicate that Indigenous women in the study had the lowest odds of attending postpartum care visits. Multiple reasons were given for not attending the visit, and post-hoc group comparisons suggested that not having the father of the baby in the home was an additional barrier to attendance. More research is needed into how healthcare providers can use this information to reduce barriers to postpartum care attendance, but these findings provide some targets for prevention efforts.

Board 213

Evaluating the validity and reliability of an instrument to conduct a formative evaluation of a social marketing campaign to promote bystander intervention to stop sexual harassment

Branscum, Paul; Hackman, Christine; Alber, J

Purpose: Training to engage in bystander intervention (BI) is mandatory on college campuses to help prevent sexual assault and harassment. To promote BI, a social marketing campaign was pilot tested with a Qualtrics panel of undergraduate students. The purpose of this study was to evaluate measures of validity and reliability for the planned evaluation of the social marketing BI program.

Methods: The social marketing campaign consisted of a number of images with text that promoted BI (e.g. students at a party while a man is talking to a girl who appears inebriated, with the text 'Step in. Check in. You can and should help.') Formative measures included credibility of the message (3-items), actor rating (7-items), message effectiveness (8-items), and affective reaction to the image (5-items). Data were collected from college sample (n=525), and psychometric data revealed indices of construct validity (confirmatory factor analysis) and internal consistency reliability (Cronbach's alpha).

Results: Students were between the ages of 18 and 24 years; a majority were Caucasian (55.4%), and women (86.2%). Initial data modeling suggested the affective reaction to the image variable be split, into 'positive' image reaction (i.e. proud, and hopeful), and 'negative' image reaction (i.e. afraid, guilty and disgusting). After this modification, the model had adequate fit (RMSEA=0.057; TLI=0.947; CFI=0.956), and all items significantly loaded on its corresponding scale. Cronbach's alpha scores were >0.70 for all scales.



Conclusions: This survey is promising for helping researchers and practitioners with more formative issues related to social marketing campaigns. Such information can be combined with summative evaluations (i.e. BI behavior, BI self-efficacy) to aid in the planning of effective health promoting interventions.

Board 214

Simultaneous Alcohol and Marijuana Use among Adolescents: 2016-2019, USA

Lewis, Melissa, A

Purpose: Simultaneous alcohol and marijuana (SAM) use (i.e., co-ingestion so that effects overlap) poses several acute health consequences among young adults. While much of the research on SAM has been with college students, less has focused on adolescent SAM use. The purpose of this study was to examine the prevalence and risk factors associated with past-30-day SAM use among a large national sample of adolescents.

Methods: Pooled data (2016-2019) from the National Survey on Drug Use and Health were analyzed among 54,382 adolescents ages 12-17 years old. Past 30-day SAM use was measured by whether or not adolescents used marijuana with their last alcohol drink. We also controlled for demographic characteristics and past month tobacco use. Weighted logistic regression models were built to determine conditional associations to SAM use.

Results: An estimated 1.64% (n = 960) of adolescents reported past 30-day SAM use, with adolescents ages 16-17 nearly 53 times the odds (OR: 52.5, 95% CI 23.7, 116.4) of reporting past 30-day SAM use. Significant racial/ethnic differences were found, with African American adolescents (OR: 0.52, 95% CI 0.37, 0.73) at a lower odds of reporting SAM use, compared to Non-Hispanic White adolescents. Adolescents who used tobacco in the past 30 days were over 2.10 times (95% CI 1.71, 2.59) the odds of engaging in SAM use.

Discussion: Significant health disparities regarding SAM use are present among adolescents. A health equity approach is needed towards understanding these disparities to inform preventative intervention efforts.

Board 215

The Association Between Mental Health and Resilience Resources in African Americans with Type 2 Diabetes

Saba, Victoria, C; Tabibi, Doonya, S; Cebulske, Lauren, D; Lehrer, H Matthew; Steinhardt, Mary, A

Purpose: This sub-study of Texas Strength Through Resilience in Diabetes Education (TX STRIDE) clinical trial assessed associations among mental health, resilience resources, and hemoglobin A1C in African Americans with Type 2 Diabetes (T2D).

Methods: Participants were middle-aged and older adults with T2D (n=226, 61.2±11 years, 74% female). Mental health measures included depressive symptoms (α =.84), perceived stress (α =.91), and diabetes distress (α =.91). Resilience resource measures included adaptation to stress (α =.75), psychological resilience (α =.92), self-efficacy (α =.91), social support (α =.90), and emotional regulation (α =.96). A1C was assessed using a DCA VantageTM Analyzer (n=140) or A1CNow® Self Check (n=86) when remote testing was necessary due to the pandemic. The



A1CNow Self Check measure was adjusted for underestimation of A1C using a validated regression equation.

Results: Depressive symptoms were positively associated with perceived stress (r = .55, p < .001) and diabetes distress (r = .50, p < .001). Higher scores on mental health concerns were associated with lower scores on adaptation to stress (r's = -.36 to -.54, p < .001), psychological resilience (r's = -.27 to -.46, p < .001), self-efficacy (r's = -.24 to -.41, p < .001), and social support (r's = -.15 to -.50, p < .05 to .001). Greater mental health concerns were positively associated with difficulty regulating emotions (r's = .57 to .69, p < .001). Finally, A1C (mean=8.18±1.9) was positively associated with depressive symptoms (r = .14, p < .05), perceived stress (r = .15, p < .05), and diabetes distress (r = .30, p < .001).

Conclusions: Among African American adults with T2D, mental health concerns were associated with higher A1C and lower resilience resources. Our findings suggest that resilience resources may be beneficial for mental health concerns and the co-management of T2D and depression in African Americans with T2D.

Board 216

Egocentric Social Network Characteristics, Mental Health, and Flourishing Among College Students

Madhiri, E; Patterson, M. S.; Gagnon, L. R.

Introduction

College students are more likely to suffer from mental health disorders than the general population, with some researchers reporting prevalence rates up to six times higher among college students. Flourishing, a concept closely related to mental health, is an individual's subjective perception of their overall well-being. Research suggests that social relationships influence mental health and flourishing among college students. This study uses social network analysis (SNA) to examine support provision within college students' personal networks relative to mental health and flourishing.

Methods

Students (n=571) from a private university in the southern United States completed an online survey measuring demographic information, mental health scores, flourishing scores, and egocentric network data. This study computed network properties, which included homophily, and network composition based on gender, relationship, communication frequency, and support. Multiple regression was used to determine how ego- and network-level factors explain variance in respondents' flourishing and depression scores.

Results

A higher network composition of friends in an ego's composition was associated with higher depression scores (b=0.02, p=0.02) compared to networks composed of family members, significant others, and/or roommates. Having a higher composition of females in an ego's network was associated with lower depression scores (b= -0.02, p=0.05). Higher network support was associated with better flourishing scores (b=2.57, p<0.001).

Conclusion



5:45 pm – 6:45 pm

Results from this study indicate egocentric characteristics are associated with depression and flourishing among this group of college students. Future studies should collect data on alter-toalter interactions, which allow for the exploration and creation of structural variables such as network density and transitivity relative to health. Structural variables might provide more insight into the association between support, depression scores, and flourishing scores. In addition, longitudinal studies would provide a more accurate association between egocentric network characteristics, depression, and flourishing.

Board 217

Restaurants as Environments for Healthy Eating: Factors that Contribute to Restaurant-Based Healthy Eating Program Implementation in Louisiana

Moore, Tamecia; Fuster, Melissa; Quantz, Yvette; Kimball, Molly; Knapp, Megan

Purpose: Guided by social cognitive theory (SCT), the purpose of this study was to evaluate restaurant manager/owner perceptions and identify factors that contribute to implementation and sustainability of restaurant-based healthy eating program (Ochsner Eat Fit) in Acadiana, Louisiana. The program aims to improve food environments by increasing access to and availability of healthy foods in restaurants.

Methods: From 2019 to 2020, data were collected from restaurants who were newly enrolled as an Eat Fit (EF) partner. Cross-sectional data were gathered by surveying restaurant managers/owners prior to program implementation. The variables of interest were restaurant manager/owner beliefs, perceived staff knowledge/skills, support, self-efficacy, outcome expectancies, and barriers and facilitators to implementation of Eat Fit (EF) programming. The questions pertained to restaurant characteristics, manager/owner characteristics, healthy food related attitudes and beliefs, social support, self-efficacy, barriers, and motivators for program implementation.

Results: Forty-nine managers/owners participated in the surveys. Overall, most managers/owners held positive beliefs about offering healthy food items in restaurants (n=41, 83.7%). Twenty-nine (59.2%) managers/owners had overall positive perceptions about their staff members' knowledge and skills to offer healthy food options. Most managers/owners perceived high levels of support to implement the EF program (n=41, 83.7%). Managers/owners were confident in their ability to implement the EF program in their restaurants, indicating high levels of self-efficacy (n=47, 95.9%). Overall, most managers/owners had positive outcome expectancies for the implementation of the EF program and its impact (n=32, 65.3%). Twenty-one (42.9%) managers/owners reported the median of one anticipated barrier to offering healthy food options through EF (IQR: 1-3). Barriers included customer preference, ingredient availability, staff knowledge, and operational challenges. Managers/owners selected a median of 5 facilitators or reasons for getting involved with EF (IQR: 3-6).

Conclusions: Social Cognitive Theory may be important in examining factors that influence program adherence which could potentially improve restaurant environments.

Board 218

Mixed Method Approach Towards the College Students' Life During the COVID-19 Pandemic: Let Us Be Prepared for the Next One



Khan, Raihan, K; Jehi, Tony; Zaman, Sojib; Peachey, Andy

Purpose

The COVID-19 pandemic was a difficult time for college students. This mixed-method study assessed the fear of COVID-19, anxiety, and stress of college students, coping mechanisms among Shenandoah Valley college students, and identified areas for improvement of college resources to prepare for the next crisis.

Methods

A total of 680 students completed an online survey. Three validated instruments: Fear of COVID-19, Patient Health Questionnaire (PHQ-9), and Generalized Anxiety Disorder Assessment (GAD-7) scores, were computed. Qualitative interviews were completed (n=20), and the data were categorized into multiple themes.

Results

The mean age was 22.14±5.48 years. The majority were White (81.9%), and female (80.4%) undergraduate (78.0%) students. Approximately 41% of them were in health-related majors (41.4%). Students who were females (B, 4.31; 95% CI, 5.54-3.08), enrolled in non-health related majors (B, 1.0; 95% CI, 2.0-0.01), and who did not receive COVID-19 vaccination (B, 1.25; 95% CI, 2.47-0.03) had higher fear of the COVID-19. Those who were females (B, 1.63; 95% CI, 2.93-0.32) and did not receive the COVID-19 vaccine (B, 1.33; 95% CI, 2.65-0.01) also reported having higher stress. Qualitative analysis identified several important themes: high stress, struggle during online classes, inability to receive psychological support from the college, fear of contracting and spreading COVID-19, fear of reduced academic performance, and lack of physical activity. Students recommended overhauling the college counseling system since they could not get appointments when needed. They mentioned receiving support from family members as helpful. Students shared their frustration with online-only classes and the need to meet their college mates.

Conclusions

Universities should extend and improve their counseling services and academic support systems and need to improve awareness among students to prepare for the next pandemic. We recommend collaboration among colleges (e.g., geographically close colleges, public colleges in a state) for proper use of resources.

Board 219

A Content Analysis of Sexual and Reproductive Health TikTok Posts During the COVID-19 Pandemic: The Gen-Z Experience

Nair, Isha; Chase, Kendall; Hughes-Wagner, Alexandra T.; Schwab-Reese, Laura M.; DeMaria, Andrea L.

Background: The social media app TikTok allows users to create and share content through short videos. Platforms, like TikTok, may be critical in communicating sentiment and providing ways for individuals to interact with and co-create sexual and reproductive health experiences. The purpose of this project was to identify and understand the content TikTok users were sharing related to sexual and reproductive health.



Methods: The top six videos from each targeted hashtag (e.g., #BirthControl, #MyBodyMyChoice, #PeriodProblems and #MeToo) were extracted on a biweekly basis for 16 weeks (July – November 2020). During data collection, we noted video characteristics such as captioning, music, likes, and cited sources. Additionally, we tracked content from a sampling of seven content curators who generate and share educational videos on these topics. Qualitative content analysis was utilized on the extracted videos.

Results: Most videos fell into two primary categories: personal experiences and informational content. Among the personal experiences, people shared stories (e.g., IUD removal, sexual violence), crafts (e.g., painting Pill case), or humor (e.g., celebrations of period arrival). In the informational content, dancing and demonstrations were commonly used. In addition to these approaches, content curators also answered questions through TikTok's "reply" feature.

Conclusions: TikTok is used to share messages about myriad sexual and reproductive health topics. Understanding users' exposure provides important insights into their beliefs and knowledge of sexual and reproductive health. Study findings can be used to generate valuable information for teens and young adults, their healthcare providers, and their communities. Producing health messages that are both meaningful and accessible will contribute to the co-creation of critical health information for professional and personal use.

Board 220

Sexual violence perpetration and sexual risk behaviors among adolescents: A longitudinal study

Bhochhibhoya, Shristi; Reidy, Dennis, E; Baumler, Elizabeth, R; Markham, Christine, M; Peskin, Melissa, F; Shegog, Ross; Emery, Susan, T; Temple, Jeff, R

Purpose: Sexual violence (SV) perpetration is a well-documented threat to public health with multiple physical, sexual, and psychological health consequences. Adolescents who perpetrate SV engage in sexually coercive behaviors and act as an agent for unplanned pregnancies, however, no studies have explored the longitudinal link in adolescence. This study explored the longitudinal link between SV perpetration reported by 7th and 8th-grade youth and subsequent engagement in sexual risky behaviors and pregnancies reported two years later.

Methods: We utilized harmonized data collected from three randomized clinical trial evaluations of teen pregnancy prevention programs. A total of 1927 adolescents male from 44 schools in the southern United States were enrolled among which 50% identified themselves as Hispanic and 40% as African American. Youth were asked about their engagement in SV perpetration (yes/no), the number of times they engaged in various oral and vaginal risky sex behaviors in past 3 months, and number of pregnancies they have caused. Negative binomial regression was used with full information maximum likelihood estimation in Mplus (v 8.7).

Results: Of the 1927 participants, 36 (1.9%) male youth perpetrated SV at baseline. SV perpetration at baseline was significantly associated with a higher frequency of oral sex (IRR: 3.83, p=0.02), use of drugs/alcohol before vaginal sex (IRR: 85.36, p=0.04), vaginal sex without condoms (IRR: 6.31, p=0.04) and a number of sexual partners (IRR: 3.47, p=0.05) at 2 years follow up. However, no significant association was identified between SV perpetration at baseline and getting someone pregnant when followed up two years later.

Conclusions: Our study identified the longitudinal link between SV perpetration and frequent engagement in sexual risk behaviors during adolescence. Findings further a need for early



interventions against SV perpetration for adolescents so that future risk behaviors can be reduced, thus reducing negative health outcomes, such as unintended pregnancies.

Board 221

"Sometimes I feel uglier than ever": Influences on Internal and External Body Image

Hughes-Wegner, Alexandra T; Lynch, Maia; Otten, Emily; DeMaria, Andrea L.

Background: Menstruation is a biological phenomenon experienced by many people around the world. Despite the commonality of this experience, little is known about the cultural, social, and familial factors affecting Italian women's body image during menstruation.

Objective: The purpose of this study was to understand how menarche and menstruation impact body image, pubic hair grooming, and genital hygiene behaviors. A secondary purpose was to explore Italian cultural and societal impacts on women's self-image during menstruation.

Methods: Researchers conducted 28 in-depth, semi-structured interviews (May – June 2022) with English-speaking women aged 25 – 60 years living in or near Florence, Italy who have experienced menstruation or menopause. Interviews were audio-recorded and transcribed verbatim with observer comments. HyperRESEARCH aided in data organization and analysis. Qualitative content and thematic analysis techniques were used to contextualize data and identify emerging themes.

Results: External and internal influences such as family members, friends, and psychological/physical changes left women with negative feelings surrounding themselves and their bodies during menstruation. Participants revealed cultural and social factors as additional influences on behaviors and attitudes towards menstruation and self-image. A negative view of their genitals led to a change in hygiene and pubic hair removal practices.

Conclusions: Results indicated social and cultural factors in Italy have major influence on menstruation-related body image, GSI, and genital hygiene practices. Findings highlight the impacts menstruation has on overall health and well-being, including behaviors and feelings. Information from this study can provide insight into helpful ways to discuss feelings toward menstruation and healthy menstruation management among all people in Italy to provide a better experience for women while menstruating.

Board 222

Pharmacological pain management strategies prescribed or recommended to non-Hispanic Black men with chronic pain

Oloruntoba, Oluyomi; Bergeron, Caroline, D; Zhong, Lixian; Merianos, Ashley, L; Sherman, Ledric, D; Kew, Chung Lin; Goidel, Kirby; Smith, Matthew, Lee

Background: Pharmacological strategies are often central to chronic pain management; however, pain treatment among non-Hispanic Black men may differ because of their disease profiles and healthcare interactions. This study assessed factors associated with non-Hispanic Black men being prescribed/recommended narcotics/opioids for chronic pain and their satisfaction with pain treatment/management.

Methods: Data were analyzed from 286 non-Hispanic Black men with chronic pain who completed an internet-delivered questionnaire. Logistic regression was used to identify factors associated with being prescribed/recommended narcotics/opioids for pain management



treatment. Then, ordinary least squares regression was used to identify factors associated with their satisfaction level with the pain treatment/management received.

Results: On average, participants were 56.2 years old and 48.3% were prescribed/recommended narcotics/opioids for chronic pain. Men with more chronic conditions (OR=0.57, P=0.043) and depression/anxiety disorders (OR=0.53, P=0.029) were less likely to be prescribed/recommended narcotics/opioids. Men who were more educated (OR=2.09, P=0.044), reported more frequent chronic pain (OR=1.28, P=0.007), and were allowed to participate more in decisions about their pain treatment and management (OR=1.11, P=0.029) were more likely to be prescribed/recommended narcotics/opioids. On average, men with more frequent chronic pain (B=-0.25, P=0.015) and pain problems (B=-0.16, P=0.009) were less satisfied with their pain treatment/management. Men who were allowed to participate more in decisions about their pain treatment and management reported higher satisfaction with their pain treatment/management (B=0.55, P<0.001).

Conclusion: Findings suggest that playing an active role in pain management can improve non-Hispanic Black men's satisfaction with pain treatment/management. This illustrates the importance of patient-centered approaches and inclusive patient-provider interactions to improve chronic pain management.

Board 223

The Role of Physical Activity in Reducing Symptoms of Posttraumatic Stress Disorder: A Meta-Analysis

Dolphin, Kathryn E.; Wong, Mason

Purpose: Posttraumatic stress disorder (PTSD) presents a significant global health burden, as it has a lifetime prevalence of approximately 8-percent. Current accepted treatments for PTSD include cognitive behavior therapy, exposure therapy, and pharmaceuticals. While physical activity has been shown to be effective in treating other anxiety disorders, it is not presently one of the primary treatments for PTSD. Thus, the purpose of this meta-analysis was to determine the effect of physical activity on PTSD symptom severity to explore the potential of physical activity as a potential treatment.

Methods: Google Scholar, MEDLINE, and Academic OneFile databases were searched for both published and unpublished studies that assessed the impact of physical activity on PTSD symptoms.

Results: Results indicated that physical activity leads to a reduction in PTSD symptoms (d= -.172). The effect of physical activity varied across studies, and, in an attempt to explain this variance, sample (age, sex, and veteran status) and intervention (exercise type and duration) moderators were examined. Type of physical activity (p<.001) impacted the effect on PTSD symptoms, with outdoor recreation (d= -1.061) and scuba (d= -.974) showing the greatest effect on symptom severity. Effect differences were also found between civilian and veteran populations; the effect of exercise on PTSD symptoms was greater for samples that were non-veterans (d= -.695) or included both civilians and non-veterans (d= -.659) than veterans alone (d= -.243). Further, meta-regression found that the effect of physical activity on PTSD symptoms was larger in female samples (p=.002).

Conclusions: The findings of this study suggest that physical activity leads to a reduction in PTSD symptoms. Although the current treatments are seemingly effective, stigma remains a barrier to



receiving crucial PTSD care; the introduction of physical activity as a treatment option may alleviate this stigma and promote receiving effective treatment for PTSD.

Board 224

"I think people should be more aware:" Uterine fibroid experiences among women living in Indiana

Dykstra, Chandler; Laily, Alfu; Marsh, Erica E.; Kasting, Monica; DeMaria, Andrea L.

Background: Uterine fibroids (fibroids)—benign masses of the uterus—affect up to 80% of US reproductive-aged women by age 50, making it among the most common and costly (\$17-30 billion annually) reproductive health conditions. The purpose of this study was to understand healthcare experiences of fibroids patients across the continuum of care, from early symptoms through diagnosis, treatment, and management, while also investigating the impact of the social determinants of health on fibroids experiences.

Methods: We conducted 20 semi-structured interviews with fibroids patients. Eligible participants were women aged 18 who had been diagnosed with fibroids and were residing within 75 miles of one of the two recruitment locations (Tippecanoe or Marion County) in Indiana. Interviews were audio recorded, transcribed verbatim, and analyzed using thematic analysis techniques. Constant comparative analysis identified emergent themes.

Results: Women experienced myriad physical symptoms, which often manifested into psychological and sexual disturbances and infiltrated all aspects of daily life. Internet searches were frequently mentioned as their main information source. Fertility became a prominent factor in deciding treatment options. However, health disparities prevented some from receiving quality fibroids healthcare. Some women reported staying home during COVID-19 pandemic facilitated the management of physical symptoms. Overall, participants advocated for greater fibroids awareness and education.

Conclusion: Results offer rich insight into patient experiences, highlighting areas of improvement within fibroids care. Practical recommendations to improve clinical care standards and patient health outcomes for affected women are noted. Translation of research to practice, using a combined framework of the social-ecological model and social determinants of health, can guide the development of strategic, theory-based interventions aimed to target individual, relational, communal, and societal dimensions. Practice Implications: Using patient experiences to incorporate the social determinants of health into the social-ecological framework can enhance the patient experience and offer recommendations for improvements to fibroids care across settings.

Board 225

A Field Test of Popular Chatbots' Responses to Questions Concerning Negative Body Image

Ruopeng An; Christopher W. Byron Jr.; Chen Chen; Xiaoling Xiang

Introduction: Chatbots are computer programs, often built upon large artificial intelligence models, that employ dialogue systems to enable online, natural language conversations with users via text, speech, or both. Body image, broadly defined as a combination of thoughts and feelings about one's physical appearance, has been implicated in many risk behaviors and



health problems, especially among adolescents and young adults. Little is known about how chatbots respond to questions about body image.

Methods: This study assessed the responses of 14 widely-used chatbots (eight companion and six therapeutic chatbots) to ten body image-related questions developed upon validated instruments. Chatbots' responses were documented, with qualities systematically assessed by nine pre-determined criteria.

Results: The overall quality of the chatbots' responses was modest (an average score of five out of nine), with substantial variations in the content and quality of responses across chatbots (individual scores ranging from one to eight). Companion and therapeutic chatbots systematically differed in their responses (e.g., focusing on comforting users vs. trying to identify the causes of negative body image and recommending potential remedies). Some therapeutic chatbots recognized potential mental health crises (self-harm) in test users' messages.

Conclusion: Substantial heterogeneities in the responses were present across chatbots and assessment criteria. Adolescents and young adults struggling with body image could be vulnerable to misleading or biased remarks made by chatbots. Still, the technical and supervision challenges to prevent those adverse consequences remain paramount and unsolved.

Board 226

Sentiment Analysis of Tweets on Soda Taxes

Ruopeng An; Yuyi Yang; Quinlan Batcheller; Qianzi Zhou

Introduction: As a primary source of added sugars in the American diet, sugar-sweetened beverage (SSB) consumption is presumed to contribute to obesity prevalence. A soda tax is an excise tax charged on selling SSBs to reduce consumption. This study assessed people's sentiments toward soda taxes in the US based on social media posts on Twitter.

Methods: We designed a search algorithm to systematically identify and harvest soda taxrelated tweets (~370,000) posted on Twitter since 2015. We built deep neural network models to classify tweets by sentiments.

Results: Public attention paid to soda taxes, indicated by the number of tweets posted annually, peaked in 2016 but has declined considerably ever since. The decreasing prevalence of tweets quoting soda tax-related news without revealing sentiments coincided with the rapid increase in tweets expressing a neutral sentiment toward soda taxes. The prevalence of tweets expressing a negative sentiment rose steadily from 2015 to 2019 and then slightly leveled off, whereas that of tweets expressing a positive sentiment remained unchanged. Excluding news-quoting tweets, tweets with neutral, negative, and positive sentiments occupied roughly 56%, 29%, and 15% during 2015-2022, respectively. Authors' total number of tweets posted, followers, and retweets predicted tweet sentiment.

Conclusions: Despite its immense potential to shape public opinion and catalyze social changes, social media remains an underutilized source of information to inform government decisionmaking and catalyze policy action. Social media sentiment analysis may inform the design, implementation, and modification of soda tax policies to gain critical social support while minimizing confusion and misinterpretation.

Board 227



Academic Institutional Barriers and Facilitators to Community-Based Participatory Research about COVID-19 Vaccination

Kline, Nolan S.; Griner, Stacey B.; Neelamegam, Malinee; Webb, Nathaniel J.; Morris-Harris, Deborah; Carlo, John; Guadian, Jonathan; Dunlap, Barbara

Purpose: Research on identities and intersectional social positions that perpetuate health inequality must center on the lived experiences of the people who are the focus of the study. Community-based participatory research (CBPR) offers a a way to do this by engaging community members in every step of the process and reducing power differentials between researchers and community members. This approach, however, can be challenging in academic settings with low institutional capacity for community-based work. The purpose of this study was to use a CBPR approach to examine COVID-19 disparities among Latinx groups in North Texas.

Methods: We designed a mixed method study with three community-based organizations to complete surveys (n=150) and semi-structured interviews (n=24) on COVID-19 vaccine hesitancy among Latinx individuals who: 1) have a precarious immigration status; 2) are HIV+ and/or sexual and gender minorities; or 3) can experience pregnancy. Using the concept of bureaucratic violence, we provide a case study for how institutional bureaucracies contribute to structural factors constraining research on health disparities among minoritized people.

Results: We found substantive institutional-level challenges to completing CBPR projects with Latinx individuals who experience disproportionately high rates of COVID-19 but are also less likely to be vaccinated than the overall population. These factors include: 1) Institutional Review Board process inefficiencies that are designed around clinical research rather than CBPR approaches; 2) institutional requirements that can perpetuate otherizing community organizations with undocumented immigrant leaders; 3) lack of timely compensation for community partners.

Conclusions: Although CBPR can advance health behavior research, such as vaccination among minoritized people, institutional barriers can challenge such work. These barriers render community organizations voiceless at institutional levels, creating an othering process that conflicts with CBPR aims. Researchers should consider institution-specific barriers and facilitators to CBPR that can advance or hinder health behavior research with attention to minoritized identities.

Board 228

Diet Quality Differences Among Racial/Ethnic Minorities by English Vs Non-English Speaking Household

Thomson, Jessica, L; Landry, Alicia, S; Walls, Tameka, I

Purpose: The purpose of this study was to compare diet quality scores within racial/ethnic minorities by English vs non-English speaking household designation.

Methods: Data from two cycles of the National Health and Nutrition Examination Survey (NHANES), 2015-2016 and 2017-2018, were analyzed. Diet quality was assessed using the 2015 Healthy Eating Index (HEI-2015) for which higher scores indicate more healthful eating and based on 24-hour dietary recalls. Households that spoke only, mostly, or equal amounts of English and non-English at home were classified as English speaking (ESH) households while



those that spoke only or mostly non-English at home were classified as non-English speaking (NESH) households. Statistical methods for complex survey designs were used to analyze the data.

Results: Based on 6601 participants ≥16 years of age, 53%, 51%, 46%, and 3% of Non-Hispanic Asians, other Hispanics, Mexican Americans, and Non-Hispanic blacks lived in NESH. Non-Hispanic Asians living in NESH had lower mean scores for sodium and refined grains but higher scores for saturated fats and added sugars than Non-Hispanic Asians living in ESH. Conversely, Mexican Americans and other Hispanics living in NESH had higher mean scores for total and whole fruit, refined grains, saturated fats, and total diet quality than their counterparts living in ESH. Non-Hispanic blacks living in NESH had higher mean scores for total and 6 of 13 diet quality components than non-Hispanic blacks living in ESH.

Conclusions: Total and components of diet quality are higher for Hispanic and non-Hispanic black minorities living in NESH while results are mixed for non-Hispanic Asians living in NESH. However, total diet quality was low for all household groups (\leq 60). Continued dietary guidance in multiple languages with culturally relevant materials is essential to communicate public health and nutrition guidance to promote healthy lifestyles for both ESH and NESH.

Board 229

Latent profiles of sociocultural stressors in a sample of immigrant origin Hispanic and Somali adolescents: Associations with mental health

Becerra, Lizbeth; Grigsby, Timothy. J.; Rogers, Christopher, J.; Areba, Eunice; Forster, Myriam

Introduction: Ethnic minority, immigrant origin youth experience multiple sociocultural stressors that are distinct from general measures of stress and can undermine healthy development. This study used latent profile analysis to identify heterogenous subgroups of sociocultural stress experiences (bicultural stress, perceived discrimination, and perceived negative context of reception) and whether these were associated with youths' past-week anxiety and depression.

Methods: Data are from a pilot study examining risk and protective factors for behavioral and mental health among first and second-generation Somali and Hispanic youth (N =339) living in an urban midwestern setting (mean age = 15.9; 53% male, 40% first generation). Multinomial logistic regression models predicted class membership using theoretically and empirically supported correlates (age, race/ethnicity, gender, SES, and nativity) and examined class association with anxiety and depression.

Results: The three empirically derived profiles were described as a) low cultural stress [reference group], b) high perceived discrimination, and c) high bicultural stress. Results indicated that compared to the low cultural stress profile, membership in the high perceived discrimination profile was associated with age (RRR=1.81, 95% CI=1.14-2.86) and nativity (e.g., US born vs. first-generation) (RRR= 0.0.22, 95% CI=0.07-0.75) but not depression or anxiety. Membership in the high bicultural stress profile was associated with elevated past week anxiety (RRR=2.57, 95% CI=1.86-3.54) but not depression.

Conclusion: The experience of sociocultural stress is heterogenous and certain demographic characteristics, such as age and nativity, may be important considerations in identifying youth that would benefit from tailored support services (first generation youth were at greater risk for membership in the high perceived discrimination profile). Membership in the high bicultural stress



profile was associated with past week anxiety underscoring the need to further investigate how sociocultural stressors affect mental health among immigrant origin youth.

Board 230

Examining mental health among multiply minoritized college students: The need for Intersectional approaches

DeBate, Rita, D; Bleck, Jennifer; Thompson, Erika; Kline, Nolan

Abstract: Objective: Mental health concerns among college students are a significant public health issue. Although disparities among race, ethnicity, gender, and sexual orientation separately have been documented, research employing an intersectionality lens to examine mental health disparities among college students is negligible. The purpose of this study is to address a gap in college health research by assessing how mental health issues among college students differ by intersectionality of race/ethnicity and sexual and gender identity.

Methods: This study encompassed a secondary analysis of American College Health Association-National College Health Assessment III data collected a large research university (n=1,465) located int the southern U.S. Participants included 9.6% categorized as double minority, 39.8% double majority, 13.5% single minority-sexual/gender (SG), and 37.1% single minority-race/ethnicity (RE). Measures included a) self-reported experiences of bullying, hazing, discrimination, and harassment; b) overall self-perceived health; and c) mental health (flourishing, psychological distress, loneliness, resiliency, suicide risk, alcohol risk). Comparative analyses included tests for differences between categories including chi-square tests, One-way ANOVAs with Tukey post hoc tests, and Kruskal Wallis tests for significance.

Results: Statistically significant differences were observed for hazing (p=.003), microaggression (p<.001), sexual harassment (p<.001), and discrimination (p<.001); students identifying as double minority reported more experiences compared with participants identified as double majority, single minority-RE, and single minority-SG. Double minority and single minority-SG participants had higher rates of poor/fair health (p=.026), psychological distress (p<.001), loneliness (p<.001), suicide risk (p<.001), and self-injury(p<.001), in addition to lower rates of belonging (p<.001), flourishing (p<.001), and resiliency (p<.001) as compared to double majority and single minority-RE counterparts.

Conclusions: Examining college student mental health through an intersectionality lens revealed greater mental health concerns among those identified as multiply minoritized. Implications include a multi-level approach centered on intersectionality as a theoretical lens for mental health research and programming with college populations.

Board 231

A review of social media platform policies that address cannabis marketing

Berg, Carla J.; LoParco, Cassidy R.; Pannell, Alexandria; Griffith, Lynniah; Cui, Yuxian; Romm, Katelyn F.; Cavazos-Rehg, Patricia

Background: Exposure to cannabis marketing on social media may increase likelihood of cannabis use in youth and young adults. In states with recreational marijuana, most state and local regulations have limited language regarding online cannabis marketing or via social media. Furthermore, because cannabis is federally illicit, there is little applicable federal regulation.



Given these regulatory gaps, this study examined social media policies related to cannabis marketing on platforms popular among youth and young adults.

Methods: In September 2022, we coded restrictions on cannabis marketing content (e.g., sale, trade, or gifting; paid advertising) and accessibility of cannabis marketing to those who are underage among 11 social media sites: Discord, Facebook, Instagram, Pinterest, Reddit, Snapchat, TikTok, Tumblr, Twitch, Twitter, and YouTube.

Results: All platforms except Twitch indicated that posts relating to the sale, trade, or gifting of any substance were prohibited, with 3 of these (Instagram, Reddit, Twitter) also specifying that related advertising/promotion was prohibited. Six (i.e., Facebook, Instagram, Pinterest, Reddit, Tumblr, YouTube) specified cannabis in their policies; however, Tumblr stated that their restrictions do not apply to 'drugs which may be legal or decriminalized in some regions, like marijuana, as long as the ad is properly geotargeted'. Only 4 platforms had policy language restricting content exposure among underage audiences: Discord prohibited 'adult content' to those <18, Instagram imposed minimum age restrictions for specific content categories (but cannabis and other drugs were not specified), Snapchat indicated that advertisements must be 'suitable for the selected audience', and YouTube stated that content may be age-restricted or removed if 'the content promotes a drug'.

Conclusions: The limited social media policies to prevent youth exposure to cannabis marketing compound concerns regarding insufficient governmental regulations. Youth-oriented protective initiatives on social media platforms are a critical consideration as recreational cannabis legislation continues to expand.

Board 232

An overview of kratom retail availability and associated factors in Fort Worth, Texas

LoParco, Cassidy, R.; Yockey, Robert, A.; Sekhon, Vishaldeep, K.; Olsson, S.; Rossheim, Matthew, E.

Abstract: Background: Kratom is a substance that has a complex psychopharmacological profile. Although kratom use in the U.S. is estimated to be low (past year use among 0.8% of adults), related calls to U.S. poison control centers have been increasing. Kratom and cannabis use are strongly associated, so retail availability may also be related. Moreover, kratom and Delta-8 THC (a psychoactive cannabis product) are federally unregulated, marketed as 'natural', and often used for pain relief and/or relaxation. Kratom may have greater retail availability in more socioeconomically deprived areas because harmful substances are often more heavily marketed to lower-income communities. Objectives: This study examined kratom retail availability and associated factors in Fort Worth, Texas.

Methods: This study utilized data from a second wave of calls to locations with alcohol, tobacco, and/or CBD licenses. In wave 1, 1,223/1,961 locations answered the phone; only these locations were called in wave 2. The analytic sample was comprised of the 1,025/1,223 locations that answered the phone (84%). Neither kratom nor Delta-8 THC were explicitly illegal in Texas during this time (July 2022). Cross-tabulations examined overlap in kratom and Delta-8 THC availability. Independent samples T-tests examined whether stores selling Kratom were located in areas with higher/lower area deprivation index (ADI) scores.

Results: Kratom was available in 6% of locations. Most kratom retailers had a tobacco license (92%). However, most stores with a tobacco license did not sell kratom (14%), whereas most



stores with a CBD license did (55%). Most kratom retailers (67%) were 'smoke shops.' Kratom availability was not associated with area deprivation scores. Most kratom retailers (95%) sold Delta-8 THC and two-thirds (65%) of Delta-8 THC retailers sold kratom.

Conclusions: This was the first study to examine retail availability of kratom. Findings indicate the presence of niche stores specializing in the retail of federally unregulated substances.

Board 233

State cannabis laws, risk perceptions, and Delta-8 THC use among young adults

LoParco, Cassidy, R.; Walters, Scott, T.; Zhou, Zhengyang; Rossheim, Matthew, E.

Background: Delta-8 THC is a psychoactive substance from the cannabis plant. Delta-8 THC is federally unregulated and is implicitly legal due to a 'loophole'. Delta-8 THC popularity and related consequences have been rising in the U.S.; however, few studies have examined factors associated with Delta-8 THC use. Previous research indicates more strict cannabis laws decrease access to cannabis and higher perceived risk is associated with less risky behavior overall. However, it is unclear how state cannabis laws and cannabis risk perceptions may be associated with Delta-8 THC use.

Methods: Data were collected from an online survey of 18- to 25-year-olds (n=166). Multivariable logistic regression models examined whether state cannabis laws, perceived susceptibility, and perceived severity were associated with past-year Delta-8 THC use. These 3 predictors were measured separately for Delta-8 and Delta-9 THC. Models adjusted for age, birth sex, race/ethnicity, student status, and past year Delta-9 THC use.

Results: Neither Delta-8 nor Delta-9 state laws were associated with past-year Delta-8 THC use. The following factors were significantly associated with higher odds of past-year Delta-8 THC use: lower perceived severity of harms from Delta-8, higher perceived severity of harms from Delta-9, lower perceived susceptibility to harms from Delta-9, and higher perceived susceptibility to harms from Delta-8. Those who used Delta-9 THC in the past year had 14 times the odds of using Delta-8 THC.

Discussion: State cannabis laws were not associated with Delta-8 THC use, which may be due to the easy accessibility to purchase Delta-8 THC online. Although the direction of associations between cannabis risk perceptions and Delta-8 THC use were inconsistent, results may indicate potential reverse causation. Harm reduction interventions may include media campaigns that provide information on the risks of both Delta-8 and Delta-9 THC. Longitudinal research, using larger sample sizes, is needed to better inform prevention efforts.

Board 234

Community Conditions, Practices, and Beliefs Contributing to Inequitable Opioid Overdose Education and Response in Black-Dominant Indianapolis Communities

Seo, Dong-Chul; Crabtree, Charlotte; Phillips, Justin; Lee, Shin Hyung; Cochran, Nikki

Background: Fatal opioid overdoses increased more rapidly among Blacks in the past few years than Whites. Context-rich information lacks in the factors contributing to inequitable opioid overdose education and response in Black-dominant communities.

Methods: Guided by the Citizen Health Care Model, we formed a multi-sector community-based coalition that was composed of various grassroots community partners in four target zip code



areas in inner-city Indianapolis. Coalition members included Black overdose survivors, family members of fatal overdoses, law enforcement, local emergency medical services, decision-makers at local and state governments, and legislators. The study used a parallel, cluster-matched, quasi-experimental design with pre- and post-measurements. Surveys (N=500) were conducted to probability community samples of both the target and control communities. The Coalition had monthly topical discussions as well as in-depth interviews (N=50) and three focus groups (N=24) of community residents in 2022 to elicit factors that contribute to inequitable opioid overdose deaths among Blacks. General inductive qualitative analysis was conducted for the narrative data.

Results: Seven major contributing factors emerged: (1) the target communities received fewer amounts of per capita naloxone; (2) no evidence of naloxone administration for the vast majority of fatal opioid-involved overdoses in the communities; (3) people who carried and were willing to use naloxone was low due to the fears of legal consequences (i.e., to avoid harassment from police) among many Black opioid users; (4) discretionary and/or strict drug law enforcement was in part to blame for racial discrimination in heroin arrests; (5) many Black opioid users refrained from calling 911 or did so only as a last resort due to the fear of judgmental, stigmatizing attitudes and maltreatment; (6) fewer opportunities for Black residents to receive opioid prevention education and/or naloxone administration training; and (7) stigmatizing beliefs about people who use drugs along with misperceptions that drug users might adjust their risk tolerance upward (e.g., perceive less risk from using opioids, use opioids more frequently, or use higher doses) when given access to naloxone.

Conclusions: Structural and policy interventions, de-stigmatization education, equitable naloxone distribution, and provision of adequate naloxone administration training in quantity and quality are necessary to reduce disparate burden of opioid overdose deaths among Blacks.

Board 235

Toward a Better Understanding of Adult Dual Use of Cigarettes and E-cigarettes Based on Use Intensity and Reasons for Dual Use

Lee, SH; Han, D-H; Seo, D-C

Background: Dual use of combustible cigarettes and e-cigarettes is an emerging phenomenon among U.S. adults. Literature suggests two primary reasons for this emerging use (i.e., to help quit smoking and to stealth vape). This study investigated user profiles based on use intensity and the reasons for dual use.

Methods: A total of 1,151 U.S. adult dual users were drawn from the 2018-2019 Tobacco Use Supplement to the Current Population Survey. We divided them into four groups: daily dual users (n=189), predominant smokers (n=608), predominant vapers (n=143), and non-daily dual users (n=211). We performed weighted multivariable logistic regressions to identify factors associated with the two primary reasons for dual use.

Results: 3 in 10 of U.S. adult dual users used e-cigarettes to help quit smoking while 2 in 10 of U.S. adult dual users used e-cigarettes to stealth vape. Compared to daily dual users, predominant smokers [adjusted odds ratio (AOR) = 0.61, 95% CI = 0.23, 0.62] were less likely to use e-cigarettes to help quit smoking whereas predominant vapers (AOR = 1.80, 95% CI = 1.04, 3.13) were more likely to use e-cigarettes to help quit smoking and less likely to use e-cigarettes to stealth vape (AOR = 0.30, 95% CI = 0.10, 0.89).



Conclusions: There was notable heterogeneity among the four groups of dual users. As the landscape of tobacco use is rapidly changing with an increasing popularity of e-cigarettes, reasons as well as behaviors of dual users need to be regularly monitored for effective tobacco control.

Board 236

Opioid prescribing for chronic pain in federally qualified health centers – post Centers for Disease Control and Prevention guidelines

Price, Anna, E; DeNisco, Sue; Milner, Kerry

Background: The Center for Disease Control (CDC) published opioid prescribing guidelines in 2016 in order to improve the care of patients with chronic pain. Federally qualified health centers (FQHC; i.e., community health centers that receive federal funds for services in medically underserved, low-income areas) were required to implement these 2016 CDC guidelines. This study examined primary care providers' (PCPs) perceptions of opioid prescribing in FQHCs after implementation of the 2016 CDC guidelines.

Methods: Purposive sampling was used to identify 13 PCPs who treat patients with chronic pain at one of two FQHCs located in a large, lower income, diverse community in the Northeast. Interviews were conducted in person using a semi-structured interview guide. PCPs were asked to describe their experiences prescribing opioids, challenges and barriers to prescribing opioids, and challenges and barriers to weaning patients off of opioids. The transcripts from the interviews were imported into Atlas.ti qualitative statistical software for analysis.

Results: In both FQHCs, providers were predominantly female, middle aged, in practice an average of 13-15 years, and mostly specializing in internal or family medicine. PCPs reported limited time, shortage of medication-assisted treatment-trained providers, insufficient patient management standard processes, and their own fear of patient addiction as challenges when prescribing opioids for chronic pain. PCPs also reported wanting to recommend alternatives to opioids for chronic pain management, but systemic, patient, and personal barriers impede their efforts.

Conclusions: The study findings indicate that FQHCs would benefit from examining their current pain management policies and practices and addressing policies and practices at odds with the CDC guidelines. FQHCs need to provide continuing education on pain management for PCPs and partner with external organizations to facilitate patient use of recommended alternative pain treatments. Future research should examine the efficacy of such strategies for improving opioid prescribing practices among PCPs at FQHCs.

Board 237

Testicular cancer symptom recognition and stage of diagnosis

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Purpose: Despite generally favorable testicular cancer treatment outcomes, the substantial contrast in survivorship and quality of life between early- and late-stage cases warrants the need for interventions that promote early detection of TC. A critical component to this process includes registration of disease symptoms. Therefore, there is a need to further explore the



relationship between symptom reporting and stage diagnosis to help develop a spectrum of TC symptoms that could assist physicians diagnosis the disease earlier.

Methods: A cross-sectional study was employed to explore possible associations between TC symptom presentation and stage of diagnosis. An original 40-item survey was distributed among TC survivors to determine the potential impact of several risk factors and behaviors upon diagnosis. This analysis aimed to explore how certain patient-driven experiences could serve as catalysts for seeking medical care for testicular health concerns.

Results: Correlation analyses indicated the strength/significance of relationship between reported symptoms and stage diagnosis. The only non-significant association was self-reported testicular pain. Experiencing hot flashes and having no symptoms had positive associations with later-stage diagnosis. Change in shape had a significant negative association with later-stage diagnosis. Logistic regression explained relatively low variance in the data (r2=0.1415), it was statistically significant (Chi2 probability<0.001). Pain (OR=1.6524, p<0.05), Hot Flashes (OR=5.7893, p<0.01), and No Symptoms Experienced (OR=12.4836, p<0.01) were all significant predictors of a more advanced stage diagnosis.

Conclusion: The concern around uncommon or atypical symptoms are that they are inexact and indistinct. In short, they are not very clear and/or obvious signs that TC is present. However, perhaps in tandem with other more overt symptoms they can serve as more confirmatory variables for a suspect case or, if observed with other uncommonly reported symptoms that it could serve as a viable option for the diagnostic process to consider TC as a possible prognosis.