March 19, 2021 3:00PM EST

Aging

Poster 20-05

Assessing feelings of social isolation among community-dwelling older adults

Smith, Matthew; Lachenmayr, Sue; Eagle, Leigh Ann

Background: Social isolation among older adults is a complex public health issue, which is associated with an estimated $6.7 billion in annual Medicare spending. A lack of social connections has been linked to premature mortality, suicide, and cognitive decline among aging populations. There is a critical demand to develop assessments that identify social isolation risk among older adults and link them to needed resources and services. This study examined associations between the Upstream Social Isolation Risk Screener (U-SIRS) constructs and self-reported feelings of being isolated from others. Methods: The U-SIRS was developed to assess social isolation risk among older adults within clinical and community settings. Comprised of 29 items, the U-SIRS assesses physical, emotional, and social support aspects of social isolation. Using an internet-delivered survey, data were collected from a national sample of 4,101 adults age 60 years and older. Participants completed the U-SIRS and additional items on sociodemographics and other health risks. A binary logistic regression model with backwards stepwise deletion was performed to identify factors associated with self-reported feelings of being isolated from others. Results: Approximately 35% (n=1,442) of participants reported feeling isolated from others. The average age of participants was 69.9 (±5.2) years, and the majority was female (58.3%), Caucasian (73.3%), retired (75.6%), and married (52.7%). Participants who had more chronic conditions (OR=1.04, P=0.021) and higher education levels (OR=1.18, P=0.007) were more likely to feel isolated. Participants reporting higher levels of risk in terms of life satisfaction (OR=1.43, P<0.001), perceived belonging (OR=2.26, P<0.001), and depressive symptomology (OR=1.99, P<0.001) were more likely to feel isolated. Conclusion: Findings suggest the need to embed easy-to-use screening assessment tools into the workflow of clinicians and community providers to identify risk factors and initiate a pathway for older adults to access resources and increase connectivity.

Poster 20-09

Characterizing advance care planning among older adults living with HIV as stages of change

Nguyen, Annie; Nelson, L; Bailey, J

PURPOSE: Over half of people living with HIV infection in the US are older adults ages 50 and over. Older adults living with HIV (OALWH) are at increased risk for health threats pointing to the importance of engaging in advance care planning (ACP). However, ACP rates remain low. METHODS: Our study characterizes ACP among OALWH by applying the Transtheoretical Model to conceptualize ACP as a health behavior in terms of the stages of change. ACP was assessed via cross-sectional surveys and measured using the ACP Engagement Survey. Preliminary data collected from 87 respondents in Los Angeles, CA are reported here. RESULTS: Race/ethnicity:

41.7% Hispanic/Latino, 29.8% Black; 84.7% male; 63.5% gay or lesbian; 50.5% completed high school or less; mean age of 59.4 (SD=7.0); mean of 22.7 years (SD=8.1) since HIV diagnosis. The change stages for signing an Advance Directive were: pre-contemplation (never thought of it/not ready to do it; 55.8%), contemplation (doing in next 6 months; 12.8%), preparation (doing in next 30 days; 8.1%), and action/maintenance (already did it; 23.3%). The breakdown for designating a Healthcare Proxy were: pre-contemplation (58.6%), contemplation (10.3%), preparation (3.4%), and action/maintenance (27.6%). Compared to participants in higher level stages for completing an Advance Directive an designating a Healthcare Proxy, those in the pre-contemplation stage were more likely to have detectable viral loads (p's<0.001) and lower purpose in life scores (p's<0.05). CONCLUSIONS: Over half of respondents were in the pre-contemplation stage for two important ACP behaviors representing opportunities for intervention around ACP education and awareness. Detectable viral loads typically indicates poorer health and poorer medication adherence. Along with the finding that respondents have a lower sense of purpose in life may indicate a group that is struggling to manage their physical, mental, and healthcare needs. These are opportunities for intervention.

Poster 20-16
Differential Risk Factors for Falls among Community-dwelling Older Adults by Cognitive Status
Yoshikawa, Aya; Smith, Matthew; Ory, Marcia

Purpose: Dementia is an increasing concern among community-dwelling older adults, which can cause an increased risk of falling. Existing literature suggests those with dementia and those taking pain medication have higher rates of falls. However, less is known about the influences of pain medication on falls among people with dementia (PWD), who often have an elevated risk of chronic pain. This study aims to evaluate fall risks associated with pain medication use by cognitive status. Methods: Data from a national representative of Medicare beneficiaries, the 2011 National Health and Aging Trends Study, were analyzed for this cross-sectional study. Two groups were created by cognitive status: (1) no cognitive impairment; and (2) dementia, which included possible and probable dementia. Survey-weighted logistic regression was performed to assess the odds of a recent fall based on pain medication use. Analyses controlled for sociodemographic characteristics, fall-related worry, balance and vision problems, and comorbidities. Results: About 76% of the 7,275 community-dwelling participants had no cognitive impairment. Among those with no dementia, falls were associated with pain medication use (OR=1.64, 95% CI 1.21, 2.24) in addition to higher fall-related worry (OR=1.42, 95% CI 1.08, 1.89) and balance problems (OR=1.61, 95% CI 1.46, 1.77). Contrarily, male gender (OR=0.65, 95% CI 0.48, 0.89), higher fall-related worry (OR=1.83, 95% CI 1.30, 2.60), balance problem (OR=1.65, 95% CI 1.46, 1.86) and non-Hispanic White compared with non-Hispanic Black (OR=0.65, 95% CI 0.42, 0.99) were associated with falls among PWD. Conclusions: Findings suggest differential risk factors for falls by cognitive status. They support the need for education about pain management especially among those no cognitive impairment. The provision of education about fall prevention for PWD, caregivers, and clinicians may help reduce the risk of falls. Future research should further examine other modifiable risk factors for falls among community-dwelling older adults.

Poster 20-20

Factors associated with past year emergency room visits among African American and Hispanic men with chronic conditions

Sherman, Ledric; Goidel, R. Kirby; Merianos, Ashley; Mahabee-Gittens, E. Melinda; Smith, Matthew

Males traditionally underutilize preventive healthcare services and routine medical visits available by primary care providers. Health resource utilization is especially limited among racial/ethnic minority men, who often prolong or delay preventive healthcare visits or use emergency rooms (ER) as primary care. This study identified factors associated with ER utilization within the past year among African American and Hispanic men age 40 years and older with one or more chronic conditions. Data were analyzed from a national sample of 1,904 racial/ethnic minority males using an internet-delivered questionnaire. A binary logistic regression model was fitted to assess factors associated with past year ER visits. On average, participants were age 56.51 (±10.03) years and self-reported 4.01 (±2.98) chronic conditions of a list of 19 conditions. Approximately 57% were African American, 40.9% were Hispanic, and 44.4% reported visiting an ER in the past year. Males who were African American (OR=1.28, P=0.019) as well as those who had more chronic conditions (OR=1.06, P<0.001), more severe sleep problems (OR=1.04, P=0.038), and higher levels of frustrations with their healthcare (OR=1.12, P<0.001) were significantly more likely to visit the ER in the past year. Relative to non-smokers, men who smoked cigarettes (OR=1.52, P=0.003), were dual tobacco users (i.e., smoked cigarettes and one other nicotine product; OR=1.44, P=0.046), and were polytobacco users (i.e., smoked cigarettes and at least two other nicotine products; OR=3.21, P<0.001) were significantly more likely to visit an ER in the past year. Findings suggest reasons for ER visits are influenced by complex disease profiles, diminished sleep quality, negative healthcare perceptions, and smoking behaviors. Efforts are needed to assess ways to facilitate preventive healthcare utilization among racial/ethnic minority men to potentially offset preventable ER visits while reducing frustrations associated with healthcare interactions. Efforts focusing on smoking cessation and disease-self management education may help decrease ER utilization.

Poster 21-04

Advance care planning engagement and self-efficacy among older adults living with HIV

Nguyen, Annie, L; Park, Bo, Y

PURPOSE: Advance care planning (ACP) is the process of articulating values and preferences for end-of-life care. Throughout the COVID-19 pandemic, healthcare providers have highlighted the importance of ACP and called for its "massive upscaling." ACP is highly recommended for all older adults and for people with underlying medical conditions. Older people living with HIV (PLWH) fall into both categories.

METHODS: We examined ACP engagement and ACP self-efficacy among older PLWH (ages 50+) by collecting data from 155 respondents in Southern California via cross-sectional surveys. We used logistic regressions to examine the relationship of purpose in life and other factors with ACP engagement and self-efficacy.

RESULTS: Respondents were ethnically diverse with 24.7% identifying as Latinx and 17.7% as Black. The majority were male (90.5%), sexual minorities (86.7%), and the mean age was 60.9 years. Odds of having high levels of ACP engagement were greater with AIDS diagnosis

(OR=2.40, p=.03), older age (OR=1.06, p=.05), and lower among racial/ethnic minorities (OR=.27, p=.003). Odds of having high levels of ACP self-efficacy were greater with high purpose in life scores (vs. low; OR=2.84, p=.02) and AIDS diagnosis (OR=2.36, p=.03). In stratified analyses, among individuals with an AIDS diagnosis (n=74), high purpose in life scores were associated with greater ACP engagement (OR=3.68, p=.05) but not self-efficacy (OR=3.17, p=.07). Among individuals without an AIDS diagnosis (n=79), high purpose in life scores were associated with high levels of self-efficacy (OR=4.22, p=.02) but not ACP engagement (OR=2.46, p=.12).

CONCLUSIONS: There is room for improvement to engage younger older adults and racial/ethnic minorities in ACP. Self-efficacy is a key component in theories of health behavior change. Findings suggest a sense of purpose in life may promote ACP self-efficacy, especially in individuals who never received an AIDS diagnosis.

Poster 21-06

Associations of food insecurity and social isolation risk among community-dwelling older adults in the United States

Smith, Matthew, Lee; Barrett, Matthew, E.; Eagle, Leigh Ann; Lachenmayr, Sue

Background. Food insecurity is a complex public health issue that affects approximately 8% of all older adult households in the United States. Partially driven by poverty and limited interaction with others, food insecurity is believed to cause and/or exacerbate social isolation and feelings of social disconnectedness.

Aim. This study examined associations of two measures associated with food insecurity on self-reported social isolation risk among community-dwelling adults age 60 years and older.

Methods. The Upstream Social Isolation Risk Screener (U-SIRS) is comprised of 13 items (Cronbach's alpha=0.80) and was developed to assess social isolation risk among older adults within clinical and community settings. Using an internet-delivered survey, data were collected from a national sample of 4,082 adults age 60 years and older. Participants completed the U-SIRS and additional items on sociodemographics and other health risks. Theta scores for the U-SIRS serve as the dependent variable, which were generated using Item Response Theory. An ordinary least squares regression model was fitted to examine associations of food insecurity with social isolation risk. The model controlled for age, sex, and whether the individual lived with a spouse or partner.

Results. Participants' average age was 69.6 (±5.2) years. The majority of participants was female (58.5%) and lived with a partner/spouse (56.9%). Over 20% of participants reported being worried or stressed about having enough money to buy nutritious meals, and almost 31% of participants reported eating alone all or most of the time. Higher U-SIRS theta scores were reported among older adults who were worried/stressed about affording nutritious meals (B=0.12, P<0.001) and ate alone more frequently (B=0.25, P<0.001).

Conclusion. Findings suggest older adults with food insecurity may have greater risk for social isolation. This highlights the need for robust and practical assessments that identify risk and link older adults to eligible resources and services.

Poster 21-43

The Relationship Between Three Sources of Social Support and Physical Activity Level Among Middle and Old Age Adults

Yuan, Shuhan; Elam, Kit; Johnston, Jeanne; Chow, Angela

Background: Nearly one out of four middle and old age adults reports no leisure-time physical activity (LTPA) during the past month, according to a nationally representative survey. Past research highlights family social support (SS) in promoting physical activity among this age group but has overlooked the impact of other sources of SS (e.g., friends and partners). Social Networks and Social Support theory (Heaney & Israel, 2008) emphasizes that different social relationships can uniquely support healthy behavior. Therefore, this study examined the unique relationship between (1) family members SS (excluding spouse/partner), (2) friends SS, and (3) partners SS and moderate and vigorous LTPA.

Method: This study included married participants age 45 or older from the third wave of the Midlife in the United States data set. Individuals reported on the social support they received from family members, friends, and partners, respectively, as well as the frequency of moderate and vigorous LTPA in which they engaged. Hierarchical linear regression was performed to explore the relationship between the three sources of SS and moderate LTPA, and separately, vigorous LTPA. Models controlled for age, gender, race, and physical/mental health conditions.

Results: All three sources of SS are strongly associated with moderate LTPA level. Support from friends ($=0.31$, $p<0.001$) and spouse/partner ($=0.15$, $p<0.01$) were positively associated with moderate LTPA level, whereas the support from other family members was negatively related to moderate LTPA level ($=-0.39$, $p<0.001$). Conversely, only support from friends ($=0.25$, $p<0.01$) was associated with vigorous LTPA level.

Conclusion: Friend SS was associated with both moderate and vigorous LTPA, but family and partner SS were only related to moderate LTPA. Friend SS appears to promote multiple levels of PA among middle and older age adults. Future programs to promote physical activity in this population should incorporate SS from friends to have the greatest impact.

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Alcohol

<u>**Poster 20-06**</u>
Associations between time spent on social networking sites and normative misperceptions related to posting alcohol-related content
Litt, Dana; Lewis, Melissa

Purpose: Adolescent and young adults' alcohol-related social networking site (SNS) behavior is an emerging health behavior challenge. Research indicates that both overestimating risk behavior and posting alcohol content on SNS are associated with greater alcohol use. The purpose of this study is to determine whether individuals who spend more time on SNS are more likely to overestimate how often peers post about alcohol on SNS (i.e. perceptions of others' behavior; descriptive norms) and how much peers approve of posting about alcohol (i.e. perceptions of others' attitudes; injunctive norms) on SNS. Methods: A sample of 15-20 year olds (N = 306, 47% male) completed a baseline survey as part of a larger study. Participants reported over a typical week how many SNS alcohol posts they make, how many SNS alcohol posts they think their peers make, how many SNS alcohol posts they approve of making, and how many posts they think their peers approve of making and how many days per week they check their Facebook, Instagram, and Snapchat accounts. Results: On average, participants believed others posted significantly more alcohol posts per week than they actually do (t = 10.2, p <.01) and that other people approved of posting significantly more posts than they actually do (t = 2.34, p < .05). These discrepancies were associated with more frequent checking of Instagram (descriptive: b = .14, t = 1.99; injunctive: b = .18, t = 2.59) and Facebook (descriptive: b = .17, t = 2.56; injunctive: b = 0.17, t = 2.50), but not Snapchat (b = .02, t = 0.24; injunctive: b = 0.12, t = 1.79). Conclusions: These findings highlight the importance of gaining a better understanding of why and for whom SNS impact alcohol-related cognitions and behaviors in order to better tackle this emerging and important health challenge.

<u>**Poster 20-14**</u>
Development and Validation of an Alcohol-Related Academic Consequences Measure
Ward, Rose Marie; Speed, Shannon; Guo, Ying; Laska, Emily

Purpose: Students admit that their drinking habits interfere with their academic performance. Approximately 1 in 4 college students report academic consequences, including missing class, underperforming on exams or papers, and receiving overall lower grades, as a result of alcohol consumption. The purpose of the current study was to develop a valid measure of alcohol-related academic consequences. Methods: Undergraduates students (n=396) were recruited for a multiple health behavior study. Participants were predominantly Caucasian and middle class; average age of participants was 20.38 (SD=2.61). Results: The researchers wrote items for the scale based on focus groups, a review of the literature, and a review of general alcohol-related consequence measures. Six academic areas were hypothesized to be impacted: effects in and outside the classroom, relationships with people in class and professors, emotions, and academic

career. The researchers used an iterative measurement development process. The exploratory factor analysis yielded a four factor structure – Classroom Effects, Academic Shortcuts, Missed Class, and Classroom Attention (explaining 60.25% of the variance). The subscales had excellent internal consistency (>.80) and positively correlated with quantity and frequency measures of alcohol consumption (r>.12). In addition, all of the subscales positively related to alcohol consequence measures (rs .21-.69). However, only the Classroom Effects scale inversely related to GPA with students reporting higher levels of classroom consequences having lower GPAs. Conclusions: The Classroom Effects subscale assesses consequences such as being unprepared for class. The Academic Shortcuts subscale addresses cheating and plagiarizing. The Missed Class subscale measures skipping or coming late to class. The Classroom Attention subscale assesses when students don't pay attention or get distracted by social media during class. The Alcohol-Related Academic Consequence scale provides a measure of the various ways that alcohol consumption impacts college students' academic experience. Intervention efforts might use these consequences to help decrease problematic alcohol consumption levels.

Poster 20-21
False-Negative Alcohol Use Disorder Identification Test (AUDIT) Results in a Rural Primary Care Setting
McDaniel, Justin; Albright, David; Holmes, Lauren; Lawson, Michael; McIntosh, Shanna; Godfrey, Kelli

Purpose: The purpose of this study was to estimate the prevalence of false-negative Alcohol Use Disorders Identification Test (AUDIT) screening results among patients in a screening, brief intervention, and referral to treatment (SBIRT) program in rural Alabama, and to determine factors associated with false-negative AUDIT results. Methods: From September 2018 to June 2019, patients (n = 4,023) were screened for alcohol abuse via the AUDIT – a 10-item questionnaire – in a medical facility lobby prior to a regularly scheduled appointment. Socio-behavioral variables were also collected at this time. Overall AUDIT scores above 6 for females and 7 for males were considered "positive," and resulted in a recommendation for brief intervention – the lowest service level in the SBIRT program. We also identified individuals who consumed alcohol at levels above the United States recommended limit for safe consumption using the first three questions of the AUDIT. We defined unsafe alcohol consumption as ≥ 5 drinks in a single day and/or > 14 drinks in a week for males and > 7 drinks in a week for females. We also estimated the relationship between socio-behavioral factors and false-negative screening results in a multivariable logistic regression model. Results: Overall, 103 patients (2.56%) screened positive for risky alcohol consumption based on overall AUDIT scores and 676 patients (16.80%) exhibited alcohol consumption patterns above recommended limits. Furthermore, of the 3,920 patients who screened negative on the AUDIT, 576 (14.69%) exhibited alcohol consumption patterns above recommended limits (i.e., false-negative). Our logistic regression model revealed that tobacco use was the strongest predictor of a false-negative AUDIT results (OR = 2.14, 95% CI = 2.06, 2.22). Other significant predictors included being female, nonwhite, of younger age, and being a veteran. Conclusions: Intervention recommendations based on AUDIT results should be informed by overall AUDIT scores and daily/weekly alcohol consumption patterns.

Poster 20-22

High-Risk Social Circles: Associations between Personal Alcohol Use and History of Sexual Assault to Peer Drinking Behavior

Patterson, Megan S; Prochnow, Tyler; Russell, Alex M.; Barry, Adam E.

Introduction: Hazardous drinking and sexual violence among college students remain public health concerns. Alcohol use, by perpetrator and/or victim, is implicated in a majority of sexual assaults among college students, and is often influenced by consumption within personal social networks (i.e., egocentric networks). The purpose of this study was to use egocentric network analysis to assess factors, including sexual assault victimization, related to having heavy drinkers in one's egocentric network. Methods: 697 students (77.2% female; 68.9% white) completed online surveys measuring demographics (age, sex, grade, Greek-life status), alcohol consumption (AUDIT scores), and sexual assault after turning 18. Respondents were asked to indicate five people they feel closest to in their life, and report drinking behaviors for each person. Linear regression assessed whether demographic variables, sexual assault victimization since 18, and drinking behaviors were associated with having a higher percentage of network ties who typically drink 5+ drinks in one sitting. Results: Approximately one in five respondents (17.8%; n=124) reported experiencing sexual assault since 18, while 12.8% (n=89) registered risky drinking scores on AUDIT, and 36.6% had at least one person who typically drinks at least five drinks when they consume alcohol. Regression analysis ($R2=.171$, $p<.001$) suggested being involved in Greek-life (i.e., fraternity or sorority; $β=.194$, $p=.008$), experiencing sexual assault since turning 18 ($β=.176$, $p=.038$), and higher AUDIT scores ($β=.361$, $p<.001$) were related to having a higher percentage of people within one's egocentric network who typically consume 5+ drinks in one sitting. Discussion: Personal drinking behaviors and experiencing sexual assault after 18 were associated with being connected to heavy drinkers in this sample. Because alcohol use often predicates sexual violence on college campuses, higher-risk social circles could increase survivors' risk of re-victimization. Future research using network perspectives could help untangle complexity of college student sexual assault and drinking.

Poster 21-16

Eye-tracking Research to Examine Alcohol Product Packaging Appeal Among Young People

Rossheim, Matthew; Peterson, Matthew; Livingston, M., Doug; Dunlap, Phenesse; Tran, Katherine; Emechebe, Ogechi; McDonald, Kayla; Jernigan, David; Trangenstein, Pamela; Thombs, Dennis

Background: Supersized alcopops are a class of beverages containing sugar-sweetened flavors and up to 5.5 standard alcoholic drinks in a single-serve can. These products pose a threat to young consumers, especially girls and women, because they are likely to reach dangerously high intoxication levels from consuming a single supersized alcopop. The products' brightly colored and ornately designed packaging may make them particularly appealing to young people, especially females. The current study is the first to examine whether supersized alcopop cans have a distinct visual appeal among young people.
Methods: 11 children (13-17 years old) and 72 college students (21-26 years old) were recruited during 2019-2020. Participants were asked to view 19 photos of convenience store display cases containing both supersized alcopop and beer products. While viewing each image, participants

were instructed to click on the beverage that looked the "coolest" (i.e., most appealing) to them. Eye-tracking hardware and software measured the amount of time participants visually fixated on supersized alcopop and beer products. Participants completed a brief survey to record their demographic characteristics.

Results: Compared to boys and young men, girls and young women had 4.6 times the odds of selecting a supersized alcopop as the product they found most appealing. Neither sex nor age group were statistically significantly associated with amount of time fixating on a supersized alcopop, nor whether the participants' initial fixation was on a supersized alcopop.

Discussion: Girls and young women had a strong preference for supersized alcopops over beer, relative to boys and young men. More research is needed examining how alcohol product packaging influences brand preference and dangerous consumption of alcohol.

March 19, 2021 3:00PM EST

COVID-19 – Group 1

Poster 21-13
Disproportionate Impacts of COVID-19 on Underrepresented Minority University Students: A Mixed Methods Survey to Assess Needs and Hear Student Voices
Hartzell, Sarah, YT; Hagen, Molly, M; Devereux, Paul, G

Introduction: Over 100 countries have ordered widespread or national school closures to reduce transmission of the COVID-19 pandemic. Inequalities in higher education heavily impacted underrepresented minority (URM) students prior to the pandemic, and without strategic action the swift change to remote online learning may exacerbate these disparities.

RQs: Are URM students more likely to experience pandemic-induced impacts on students' academic, social/family, and financial lives? How do student's perceive University actions taken in response to the pandemic: what are the sources of student concerns?

Methods: We used data from an online cross-sectional survey of randomly selected college students collected from May 4th-15th, 2020 (N=182). Based on student race, we quantitatively assessed COVID-19's impacts on transition to online learning, proximity to individuals with/at risk of COVID-19, and changes in family obligations and employment. We used open-ended questions to qualitatively characterize sources of dissatisfaction with the university's response to COVID-19 from unsatisfied students (N=40).

Results:

Quantitative Arm: 22.0% (N=40/182) of students who responded to our survey identified as Hispanic, African American, and/or Native American (hereafter "URM students"). The percentage of URM students who reported not having functional home workspaces was higher than the mean percentage among other students (40.0% compared to 20.8 +/- 11.0%), URM students reported less access to electronic devices (20.0% compared to 9.0+/-4.5%), and less internet access (32.5% compared to 18.6+/-9.4%). Almost all URM students knew someone at high risk for contracting COVID-19 and 40% reported living in the same household as someone considered high risk.

Qualitative Arm: 23% of students were unsatisfied with the university's response to COVID-19. Three themes emerged: (1) perception of university communication; (2) monetary decisions; and (3) impacts to learning.

Conclusion: The findings highlight areas for administers and educators to focus on to develop data-informed responses to strategically promote equity during this public health crisis.

Poster 21-24

Health literacy and COVID-19 information avoidance among college students

Chen, Xuewei; Li, Ming; Kreps, Gary, L.

AAHB Research Scholars Mentoring Program

Purpose: The purpose of this study was to assess the relationship between health literacy and COVID-19 information avoidance among undergraduate and graduate students enrolled in a central U.S. university.

Methods: Five hundred and sixty-one participants completed our online survey with valid responses. Data collection was conducted from April to June 2020. We used the Newest Vital Sign, a test with six questions that have a single correct answer, to assess participants' health literacy. COVID-19 information avoidance was measured using three statements on a 5-point Likert scale from strongly disagree to strongly agree: "I would rather not know about CVOID-19." "I would prefer to avoid learning about CVOID-19." "I can think of situations in which I would rather not know about CVOID-19". The information avoidance scale exhibited high internal consistency ($\alpha=0.82$). We performed multiple linear regressions to examine whether information avoidance differed by health literacy.

Results: Our sample contained 65% undergraduate and 35% graduate students (age mean = 24.99, SD = 7.47). There were 458 females (64%) and 203 males (36%). The majority of the participants were White (67%). Other radical ethnicities included Asian (9%), Hispanic/Latinos (8%), African American (7%), and Native American (6%). Those with lower health literacy scores were more likely to avoid information related to COVID-19 (b=-0.10, p=.005). After keeping sex, age, education/academic classification (undergraduate or graduate), race/ethnicity, and perceived health status consistent, lower health literacy was still associated with more information avoidance (b=-0.12, p=.003). We also found that older age was associated with less information avoidance (b=-0.01, p=.021).

Conclusions: The double burden of low health literacy and high information avoidance might cause lack of knowledge about COVID-19. For example, these students might not know about the preventive behaviors people can use to protect themselves from contagion from the virus. They might also have difficulty estimating contagion risk.

Poster 21-31

Patterns in COVID-19 myth debunking on Instagram

Dobbins, Davina; Frost, Jasmine; Wetherell, Meaghan

Purpose: Previous research into debunking has highlighted key characteristics for success, with special focus on the importance of presenting sticky facts first and avoiding reinforcing the familiarity of the myth. Social media is increasingly utilized for health behavior and health promotion campaigns, but studies on effective communication here are less common. The purpose of this poster is to identify trends in Instagram debunking styles, and communicate lessons learned in an ongoing case-study Instagram page run by the first and second authors, @Covid_Mythbusters.

Methods: We analyzed presentation trends in 11 debunking accounts with top posts for the hashtags #covidmyths, #covidfacts, #covidfactcheck, #covidhoax2020 and #covidhoaxexposed, and 8 accounts which had names similar to @Covid_Mythbusters. Of all 19, two accounts were hoax-pushing accounts, and five primarily featured unrelated content.

Results: Almost all accounts used an infographic approach featuring text over a colored background. Those with the biggest followings also included photos of the account owner. Nine out of the 12 debunking accounts analyzed used a "myth first" approach. Only one debunking account was using hoax-affiliated hashtags, but hoax-related hashtags had triple the posts of fact-related hashtags. We found several hoax accounts that used the fact-related hashtags.

The @Covid_Mythbusters page saw the greatest reach, shares, and saves on their non-promoted posts that were more relevant to personal care (e.g. "maskne" and caution fatigue). Hashtag use varied so engagement was likely content-related.

Conclusions: There are not nearly enough debunking accounts on Instagram – and most of those that are present are not using debunking best practices. Clear improvements would be to 1) present the facts first/in the headline 2) humanize content by using a spokesperson, and 3) utilize hoax-related hashtags to reach the audience that needs your content.

Poster 21-33
Pregnant in the 2020 Pandemic: When Providing Health Information, the Messenger Matters for Changing Behaviors
Whipps, Mackenzie, DM; Phipps, Jennifer, E; Simmons, Leigh Ann

Studies have shown that accurate, timely, coordinated health messaging is crucial to changing behaviors during public health crises; emerging research suggests that the 2020 pandemic is no different. Individuals – especially those who are high risk, like pregnant people – need and desire clear and consistent messaging on how to avoid contracting and spreading COVID-19 in their communities. We surveyed pregnant people in California (n=433) during June and July to explore how COVID-19 mitigation behaviors may change depending on the source of COVID-19 health information. To do so, we developed a novel "COVID-19 Mitigation Scale"; the six items (hand washing, mask wearing, having household members wear masks, social distancing, sanitizing high-touch surfaces, and sanitizing packages) load well onto a single factor scale with adequate internal consistency (α=0.71). Though the overall sample scale average was high – indicating that most pregnant Californians engaged in most of the strategies most of the time – older participants, Hispanic participants, and those living in more urban contexts reported engaging in these strategies most frequently. We also found that the messenger of COVID-19 information mattered: those who reported primarily receiving their information from public health agencies (e.g., the Center for Disease Control and Prevention) scored higher on the COVID-19 Mitigation Scale compared to those who did not engage with these sources (β=0.24, p<0.001). They were also more likely to report understanding the actions they should be taking to reduce their risk of contracting and spreading COVID-19 (β=0.20, p=0.021). These findings suggest that one particular type of health messenger – public health agencies – has been especially effective in shifting actual behaviors to reduce the spread of COVID-19 infections among pregnant people in California. This has important implications for protecting this vulnerable, yet understudied, population in a crowded and unreliable health-media landscape.

Poster L21-05

FIREARMS RELATED INJURIES AND HEALTH DISPARITIES DURING THE COVID-19 PANDEMIC

Robbins, Christopher, B; Meagher, Ashley, D

Background: Most states responded early to the threat of Covid-19 with public health measures designed to limit the spread of the disease. Guidance included masking, frequent hand washing, social distancing and stay at home orders. The purpose of this study was to determine if there was an increased prevalence of firearms injuries and interpersonal violence during the Covid-19 pandemic.

Study Design: A retrospective review was conducted using interim data collected from a large level I trauma center servicing a large mid-western urban area. The data includes all trauma encounters during the first nine months of the Covid-19 pandemic (March through November) compared with similar data from four peri-pandemic years (2016-2019). Primary outcome of interest was gunshot wounds (GSW's) with independent variables to include time period, age, gender, and race.

Results: There were 17084 emergency department (ED) visits that were included in the analysis. Firearms related injuries during the pandemic period were higher than previous time periods ($X2=13.55$, $p < .001$) and 26% higher than 2019. Assaults were not significantly different during this time compared to previous years ($p=.103$), but the pandemic period did see an increase in all forms of interpersonal violence. Multivariable logistic regression indicated a higher risk for GSW's for black versus white (AOR=6.51, $p<.001$, CI 5.68, 7.45), males versus females (AOR=3.28, $p<.001$, CI 2.74, 3.92), and a protective effect for older versus younger age (AOR=.958, $p<.001$, CI .954, .962).

Discussion: With social isolation policies and an unprecedented surge in firearm sales some metropolitan areas indicated spikes in gun violence. The results indicating an increase in gun violence during the Covid-19 pandemic from this urban trauma center are consistent with reports from other jurisdictions.

March 19, 2021 3:00PM EST

Health Disparities

Poster 20-08
Changes in Behavior and Environment as Contributors to Changes in BMI in At-Risk Minority and Low-Income Youth
Borawski, Elaine A.; Moore, Shirley M.; Jones, Sarah D.; Gardenhire, Rachel A.

Purpose: We examined predictors of BMI change over a 3-year period (captured as a slope) among pre-adolescent, predominantly minority and low-income children with excessive weight (BMI at 85th percentile or higher) at baseline, with a particular interest in family history, behavior and behavior change, and changes in physical environments for this already at-risk group as they moved from childhood into adolescence. Method: Sample included 360 urban dwelling children, ages 11-12; 77% AA, 16% Hispanic; 71% families receiving SNAP. Families were seen 4 times over 3 years; 92% retention rate. Baseline only variables included age, gender, index parent BMI, # of overweight grandparents, parents concern of child's weight, SNAP/WIC, and the number of unhealthy food retail outlets within .5 mile of home and school. As with BMI change, changes in behavior (diet, physical activity, sleep, stress) and the home food environment were captured through individual regression slopes calculated and entered in a linear regression model in blocks. Frequency of change in residences and schools was also included. Results: With the exception of family history of excess weight, none of the baseline measures were found to be significantly associated with BMI change. Rather, changes in behavior and environments largely drove the changes in BMI. Decreases in BMI were linked to having fewer overweight grandparents (p<.01), increases in fitness (number of PACER laps completed; p=.000), decreases in sedentary activity (measured by actigraphy; p<.02), decreases in amount of sleep on weekends (p<.02), and not changing schools (p=.001). Changes in residence was not linked to BMI change, nor was diet (via 24 hr recalls) or mod/vig PA. The model explained 16% of the variance in BMI slope (p=.002). Conclusions: Not surprisingly, multiple factors independently influence BMI in high risk populations, providing further evidence that reducing childhood obesity must include multi-faceted and most likely multi-generational interventions.

Poster 20-29
The combination of immigrant status and race/ethnicity helps explain disparities related to online medical record access and use
Chen, Xuewei; Schofield, Elizabeth; Hay, Jennifer; Waters, Erika; Kiviniemi, Marc; Orom, Heather

Purpose: Despite the potential health benefits associated with online medical records, the rate of use may not be equivalent across demographic groups, which may compound health disparities. The purpose of this study was to examine if online medical record (patient portal) access and use among immigrant groups differed across race/ethnicity. Methods: We used data from the nationally representative Health Information National Trends Survey (HINTS 5 Cycle 1) collected between January and May 2017 (N = 3,285). We examined associations between immigrant status and the following three binary outcomes with logistic regression: (1) being offered access

to an online medical record by their health care providers/insurers, (2) being encouraged to use one by their health care providers, and (3) having used one within the past 12 months. We also investigated whether the association between immigrant status and these three outcomes depended on people's race/ethnicity by interacting the two. We applied survey weights and kept sociodemographic variables and internet/insurance/healthcare access as covariates. Results: About 51% of the sample were offered access to an online medical record, 39% were encouraged to use one, and 29% had used one within one year. There were no main effects for immigrant status or race/ethnicity. The association between immigrant status and being offered access to an online medical record depended on Asian race/ethnicity (interaction effect p=.027). US-born Asians had the highest adjusted rate of being offered access to an online medical record (67%); however, foreign-born Asians had the lowest adjusted rate (38%). Other interaction effects were non-significant. Conclusions: There were differences in self-reported being offered access to an online medical record as a function of immigrant status for Asians. Therefore, encouraging health care providers/insurers to offer access to an online medical record among foreign-born Asians could be an effective strategy to increase these patients' online medical record use.

Poster 21-11

Differences in immigration-related stress among US-born adolescent-undocumented immigrant parent dyads and its relationship to parental anxiety
Velasco-Huerta, Fernanda; Obasi, Ezemenari, M.; Grzywacz, Joseph; Granger, Douglas; Hernandez, Daphne, C.

Background: Immigration-related stress, which includes fear of deportation, has increased among the Latino community. US-born children of undocumented are under constant awareness of the threat of having one or both parents deported. Thus, it is unclear as to whether undocumented parents or US-born children experience higher levels of immigration-related stress. Further, it is important to examine how higher levels of immigration-related stress are related to parental anxiety, as parental anxiety can have spillover effects into the family environment.
Purpose: The purpose of the study is two-fold: 1. To delineate variability in immigration stressors among US-born Latino adolescents-undocumented immigrant parent dyads and 2. To examine the potential anxiety vulnerabilities among undocumented immigrant parents in relation to immigration-related stress.
Methods: Self-identifying Latino immigrant parents and their US-born youth (12-16 years) participated as part of a larger feasibility study examining salivary cortisol among US-born adolescent-immigrant parent dyads in Houston, TX (September 2019-January 2020). Parents and adolescents reported on immigration-related stress from the Hispanic Stress Inventory Version 2 (Parents, 9-items) and Adolescent Version (7-items). Parents also reported on anxiety symptoms (7-items, General Anxiety Disorder Screener). A paired t-test was conducted to compare parent and adolescent measures of immigration stress, and a Pearson correlation between immigration stress and anxiety.
Results: Nineteen undocumented immigrant parent and their US-born adolescents participated [Parent: Meanage=41.94 (SD=1.14), 95% female, 63% married, 53% high school diploma or more, 52% unemployed; Adolescent: Meanage=13.68 (SD=0.40), 63% male]. Undocumented parents reported higher levels of immigration stress [t(24)=6.22, p<.001] compared to their US-born adolescents. Parental experiences with immigration stress were strongly correlated with parental anxiety (r=.53, p<.05).

Conclusions: Parental documentation status appears to be a factor in immigration-related stress. The strong correlation between parental immigration-related stress and anxiety is concerning as it has the potential to spillover into the family environment.

Poster 21-19
Feasibility of collecting salivary cortisol samples from mixed-status Latino families

Mejia, Karen; Obasi, Ezemenari, M.; Grzywacz, Joseph; Granger, Douglas; Hernandez, Daphne, C.

Background: Parents and children jointly influence each other's physiological responses. Also, parent's and child's cortisol production (i.e. cortisol synchrony) may offer insight into family-level stressors that may contribute to health disparities. However, researchers are less likely to collect salivary cortisol samples from mixed status Latino families (US-born adolescent who resides with an undocumented immigrant parent) due to legal concerns and concerns regarding low study participation.

Aims: 1) To assess the feasibility of collecting salivary cortisol from mixed-status and documented status Latino families (i.e. US-born adolescent living with a documented immigrant parent). 2) To compare adolescent-parent synchrony profiles of dyads within mixed-status families and within documented families. 3) To compare the synchrony profiles between adolescents and between parents by parental documentation status.

Methods: Self-identifying Latino immigrant parents and their US-born youth (12-16 years) participated in a feasibility study in Houston, TX (September 2019-January 2020). Parents self-reported their documentation status. Parents and adolescents provided four saliva samples on the same day. Samples were assayed for cortisol using validated kits and established methods. Analyses included paired t-test (aim 2) and two-group mean comparison tests (aim 3).

Results: Twenty-five immigrant parent-US-born adolescent dyads participated [19 undocumented parents; 5 documented parents]. Cortisol levels of undocumented parents did not differ at any of the four time points when compared to their US-born adolescents [$t1(18)=1.54$, $p=.14$; $t2(18)=-1.32$, $p=.20$; $t3(18)=-0.43$, $p=.67$; $t4(18)=-1.65$, $p=.12$]. Cortisol levels of documented parents did not differ at any of the four time points when compared to their US-born adolescents [$t1(5)=2.48$, $p=.06$; $t2(5)=0.81$, $p=.46$; $t3(5)=-0.04$, $p=.97$; $t4(5)=-1.53$, $p=.19$]. Cortisol synchrony comparisons that occurred between adolescents and between parents by parental documentation status did not differ.

Conclusions: It is feasible to collect salivary cortisol samples from undocumented Latino immigrants and their US-born adolescents. Cortisol synchrony profiles within dyads, between adolescents, and between parents were similar.

Poster 21-52
Whole Exome Sequencing for newborns: Pregnant Latina's Viewpoints

Bruckner, Chase, M; Wang, Haocen; Page, Robin, L; Lopez, Daniela; Arkatkar, Samruddhi; Young, Christine; Martinez, Denise; Robbins-Furman, Patricia; Montalvo-Liendo, Nora; Chen, Lei-Shih

Purpose: Whole Exome Sequencing (WES) is a DNA sequencing technology that provides a wide range of genetic information. There is, currently, a debate about the incorporation of WES into

standard newborn screening in the United States, and the views of racial/ethnic minority groups about WES are still unknown. To fill this gap, this study aimed to explore pregnant Latina's perspectives about pursuing WES for their newborn babies.

Methods: We conducted semi-structured interviews with 32 Latinas who were 13-39 weeks pregnant in southern United States. Participants were provided health education about WES before being interviewed. Data was analyzed using an emergent coding approach with the assistance of NVivo 8 software.

Results: The majority of pregnant Latinas in our sample were Catholic (72%), had a high school education or less (72%), and were either uninsured or had Medicaid/Children's Health Insurance Program health coverage (94%). None of the participants had heard about WES before this study. Most participants (72%) believed there were benefits for their babies to undergoing WES, including that WES would allow them to know their babies' health status in advance so that they could be mentally, physically, and financially prepared for a baby with genetic abnormalities. Some interviewees (28%) shared their concerns regarding WES, including cost and the negative emotional impacts of "bad" test results. Despite these concerns, all but one of the participants (97%) were willing to pursue WES for their baby if the cost was covered by health insurance. Additionally, all participants agreed that WES should be offered to all newborn babies.

Conclusions: Our findings suggest that despite some concerns, the majority of pregnant Latinas had positive attitudes toward pursuing WES for their babies. Health policy makers should consider Latinas' viewpoints when making recommendations concerning whether, and how to adopt WES into routine newborn screening.

March 19, 2021 3:30PM EST

COVID-19 – Group 2

Poster 21-01
#StayAtHomeSafety Campaign to Prevent Home-Related Injuries Due to COVID-19
Mehan, Tracy; Smoske, Shea

Purpose: Prevent Child Injury launched the #StayAtHomeSafety campaign on March 25th, 2020 in response to the COVID-19 pandemic with the goal of increasing awareness of child injuries that occur in and around the home, as families were spending more time at home due to directives to shelter in place and socially distance.
Approach: The campaign included a Twitter chat and a frequently updated page on the Prevent Child Injury website that served as a hub for home safety and COVID-19 information. Before the event, we called upon individuals and organizations (American Academy of Pediatrics, Parents Magazine, Safe Kids Worldwide, and more) to participate in spreading awareness of the campaign and taking part in the Twitter chat.
Results: The #StayAtHomeSafety Twitter chat resulted in 336 contributors, 999 tweets with a reach of more than 6.2 million and more than 18.3 million timeline deliveries. The COVID-19 webpage on the Prevent Child Injury website has over 2,000 pageviews.
Conclusions: In less than a week, nearly 20 organizations and 8 poison centers signed on to become partners of the campaign by promoting the materials to their networks, creating their own #StayAtHomeSafety materials, and participating in the Twitter chat. The hashtag continues to be used with 500+ new contributors, writing 1000+ tweets reaching 2 million more people and 4.2 million more timeline deliveries.
Contributions to Injury Prevention Science/Significance: With schools, businesses, and public places closing in late March 2020, children spent more time in the home under circumstances that included altered routines, gaps in supervision, and parental stress. These conditions put children at increased risk for injury in the home. #StayAtHomeSafety focused on protecting children from preventable injuries and helped parents and caregivers understand why preventing injury is especially important in the midst of a national emergency.

Poster 21-08
Conducting Research Six Feet Apart: Transforming Qualitative Research To Meet the Emerging Research Needs During a Pandemic
Eigege, Chinyere, Y; Daundasekara, Sajeevika, S; Olmeda, Kiara; Walton, Quenette, L; Hernandez, Daphne, C

Background: The COVID-19 pandemic and associated urban county-wide lockdowns forced researchers to transform their on-going qualitative research. Prior to the county-wide lockdown, focus groups were conducted in-person on a college campus. During the county-wide lockdown, focus groups were conducted using a teleconferencing platform. Yet, the feasibility of transforming how qualitative research was conducted from in-person interviewing to teleconferencing interviewing among a low resourced population was unknown.

Purpose: Utilizing data from a research study with community college students, recruitment efforts and participant attendance records that occurred before a county-wide lockdown (January-February 2020) to those that occurred during a county-wide lockdown (March-April 2020) were compared.

Methods: Recruitment efforts for each focus group conducted measured the number of times potential participants were contacted by phone call and text to the total number of potential participants contacted. Participant attendance records included the proportion of participants that showed up/not showed up, along with the number of focus groups and average number of participants per focus group. To estimate whether there were differences in the recruitment efforts and attendance records before and during the county-wide lockdown, independent sample t-tests was conducted.

Results: Participants before and during the lockdown did not differ on their age (Xage=40, SD=13), sex (78% female), race/ethnicity (62% black, 28% Hispanic), marital status (92% single), employment status (83% unemployed), nor school enrollment (50%). The proportion of times participants were contacted (t(14)=0.021; p=0.984), and the rate that participants showed up (t(14)=-0.500; p=0.625), and did not show up (t(14)=0.561; p=0.584) did not differ between the two time points. While twice as many focus groups were conducted during the shutdown compared to before the shutdown, the average number of participants did not differ (t(14)=0.891; p=0.388).

Conclusion: Teleconferencing software is a feasible approach to sustaining a research study conducted in an urban setting during a pandemic.

Poster 21-26

Impact of COVID-19 on the Alabama State Partnership Initiative (ASPI) to Address Obesity Disparities

Knol, Linda; Paschal, Angelia M; Chatham, Lita; Jones, Teresa; Clark, Debra; Preston, Rebekah

BACKGROUND: Several studies suggest adults gained weight and altered their eating and physical activity (PA) during COVID-19 quarantine. Obese and minoritized populations are at greater risk for developing severe cases of COVID-19. The purpose of this study is to report evaluation findings of a weight loss intervention for rural adults and the subsequent impact of COVID-19.

METHODS: Scale Back Alabama (SBA) is a free 12-week weight loss program. Using a team approach, it focuses on improving health promoting behaviors (eating patterns and PA). It includes weekly thematic educational messages, cooking demonstrations, grocery store tours, and weigh-ins.

Process evaluation data was collected from participants and site coordinators. Outcome evaluation data were from participant weigh-ins and phone interviews. The interview guide included BRFSS fruit/vegetable (f/v) intake, PA, and sugar-sweetened beverage (SSB) intake items. Baseline and follow-up data were compared using paired t-tests with an a priori $\alpha \leq 0.05$.

RESULTS: Process Evaluation: Recruitment Capability - Of 173 SBA participants, 80 volunteered for the evaluation (mostly African American and female). No significant differences were in characteristics between baseline and follow-up. Acceptability - The program was rated favorably. Yet, COVID-19 negatively impacted health behaviors, morale, and interactions. Implementation - Educational messages maintained, but COVID-19 led to an abrupt halt in in-person activities.

Outcome Evaluation: Body weight and SSB intake significantly changed. Obesity dropped from 73.8% to 64.3%. F/V intake and PA changes were not significant.

DISCUSSION: Baseline behaviors were either maintained or improved. COVID-related challenges were noted. The study differed from others in that baseline outcome data was collected prior to the quarantine and it focused on individuals in a weight loss program.

IMPLICATIONS: Considering COVID-19, novel implementation strategies and alternative methods of community health interventions are needed. Findings suggest innovative use of technology, home-based strategies, and programs that include social connection and support.

Poster 21-50
What factors predict COVID-19 vaccine intention in college students?
Hackman, Christine L; Ross, McKenna; Lawston, Ashlynn; Lowsky, Luna; Chean-Udell, Greer

Background: COVID-19 causes a wide range of symptoms, from a mild cough to multiorgan system dysfunction (CDC, 2020). With cases in the U.S. soaring into the millions, increasing knowledge of preventive measures and mitigating further spread is essential. College students may contribute to the spread of this disease because many may experience only mild symptoms, and may be in the position to spread the virus to other, higher risk populations. A COVID-19 vaccine is a feasible and important tool to reduce the spread of COVID-19. We currently do not have an adequate understanding of college student perceptions and likelihood of getting a COVID-19 vaccine once it is available.

Purpose: To examine factors that predict likelihood of vaccination against COVID-19 in college students.

Methods: Undergraduate students were recruited through general education courses at a public western US university to complete an online survey measuring their perceptions, experiences and behaviors regarding the COVID-19 pandemic. A multinomial logistic regression was used to evaluate the predictive ability of gender, combined race and income variable, perceived susceptibility, perceived severity, and self efficacy to understand the factors that influence likelihood of vaccination against COVID-19 once one becomes available.

Results: Participants (n=241) were between ages 18 and 24, with a majority of participants identifying as female (74.7%). The multinomial logistic regression indicated that self-efficacy (B=-0.226, SE=0.094, p=0.017) and perceived susceptibility (B=-0.737, SE=0.349, p=0.035) were significant predictors for likelihood to obtain a COVID-19 vaccine, while perceived severity, gender, and combined race and income were not significant predictors.

Discussion: The results indicate that most students would be likely to get a COVID-19 vaccine. Health education interventions focusing on college students should address perceived susceptibility and self-efficacy regarding vaccination when one becomes readily available.

Poster L21-06

Recruitment methods for focus group discussions on Covid-19 and seasonal influenza vaccination intention among Pima County adults

Neddermeyer, Ava; Cantin, Cori; Jordan, Domo; Ruiz, Sara; Raghuraman, Veena; Marczak, Jacob; Kinkade, Mary; Krauss, Beatrice; Perez-Velez, Carlos; Madhivanan, Purnima

Background: Given recent progress towards a safe and effective Covid-19 vaccine, and recommendations for flu shots to protect against seasonal flu in the context of the SARS-CoV-2 epidemic, a University of Arizona/Pima County Health Department collaboration has undertaken the design of a community survey to understand factors leading to seasonal influenza and Covid-19 vaccine attitudes and behaviors. Participants were recruited to participate in focus group discussions (FGDs) using evidence-based recruitment methods.

Methods: The team recruited 56 adult participants in Pima County for FDGs about attitudes regarding Covid-19/ seasonal influenza vaccination from August to November 2020. Personal and community networks were used to reach participants via phone, email, social media, and print media (posters). A monetary reward of 25 dollars was offered as compensation for participation. Recruitment method analysis was conducted using the survey, email and phone records.

Results: It was found that minority populations were most difficult to recruit. The highest response we received was from White females, and the lowest responses we received were from African American and Spanish speaking males. Those who regularly vaccinated and were probably more likely to participate in a focus group discussion in comparison to those who did not vaccinate regularly. Reaching out by phone call to personal contacts and those who had already agreed to participate was most effective for gaining participation.

Conclusion: Findings suggest that recruiting personal contacts via email and phone is the most effective followed by emailing community organizations. A modified recruitment plan will be used for the next stage in the research. Future analysis of recruitment efforts in this study will include aiming towards tracking the success of recruitment methods through UTM codes. Ultimately the findings from this research will be used to ensure effective and safe promotion of vaccination against Covid-19/ seasonal influenza in Pima County.

March 19, 2021 3:30PM EST

E-Cigarettes

Poster 20-11
Combustible and Electronic Cigarette Use and Insufficient Sleep among U.S. High School Students
Merianos, Ashley; Jandarov, Roman; Choi, Kelvin; Fiser, Kayleigh; Mahabee-Gittens, E

Purpose: Current tobacco product use and insufficient sleep are prevalent problems facing U.S. adolescents. Limited research has assessed the association between current use of e-cigarettes and cigarettes and sleep health. The objective was to investigate the relationship between use of e-cigarettes only, cigarettes only, and dual use of both products, and insufficient sleep among U.S. high school students. Methods: We conducted a secondary data analysis of the 2017 Youth Risk Behavior Survey including 11,296 U.S. high school students. We used the following categories to classify students based on their current use: 1) no use; 2) e-cigarette use only; 3) cigarette use only; and 4) dual use of e-cigarettes and cigarettes. We built a logistic regression model that adjusted for demographics (sex, grade level, and race/ethnicity) and potential confounders (television watching, computer use, mental health problem, and alcohol use). Results: Overall, 73.4% of students reported insufficient sleep of <8 hours/day on average, with high rates of insufficient sleep reported among those who used e-cigarettes only (78.8%), cigarettes only (72.6%), and who engaged in dual use (86.7%). Adjusted results indicated students who were current e-cigarette only users were 1.60 times more likely (95%CI=1.05-2.46) to report insufficient sleep compared to students who did not currently use e-cigarettes and/or cigarettes. Students who currently used cigarettes only were significantly less likely to report insufficient sleep (adjusted odds ratio=0.51, 95%CI=0.30-0.86), while adjusting for demographics and the confounders. No differences were found between current dual product use and insufficient sleep. Conclusions: We report that current use of e-cigarettes increased the odds of insufficient sleep, but current use of cigarettes decreased the odds. Prevention efforts are critically needed to simultaneously reduce the overall rise in current tobacco use trends due to the surge in e-cigarette use and increase sleep health among this vulnerable population.

Poster 20-18
Effect of T21 Policies on E-Cigarette Use among Military Personnel
McDaniel, Justin; Patrick, S.

Purpose: Some states have raised the minimum legal age for sale of tobacco products from 18 to 21 ("T21" policies), although some of these states, such as California, have military personnel exemptions. The purpose of this study was to determine whether the relationship between living in a T21 state and e-cigarette use was moderated by military service status among individuals aged 18 to 20 years. Methods: Data for this study were obtained from the 2016-2018 Behavioral Risk Factor Surveillance System (BRFSS) and from state-level legal documents pertaining to T21 policies. Because we excluded respondents who, at the time of the survey, were living in a state that had local but not state-level T21 policies, our final analytic sample of individuals aged 18 to

20 years was 11,926, of which 801 reported military service. Current use of e-cigarettes (no = 0, yes = 1) served as the dependent variable. Using a multi-level survey-weighted generalized linear mixed model (GLMM), we evaluated the moderating effect of military service on the relationship between T21 state of residence and e-cigarette use with an interaction term. In this model, we also controlled for sex, race, age, annual income, mental distress, binge drinking, and combustible cigarette use. State of residence was included as a random effect. Results: E-cigarette use was lower among military personnel in T21 states (6.45%) than military personnel in non-T21 states (16.10%, Cohen's h = 0.31); however, these differences were trivial among civilians (non-T21 state = 13.99% vs.T21 state = 13.93%, Cohen's h < 0.01). Results of the GLMM showed that the adjusted interaction term for moderation was significantly different from zero (aOR = 0.24, 95% CI = 0.13 – 0.44). Conclusions: Abolishing military exemptions to state-level T21 policies may be associated with lower e-cigarette use rates among military personnel.

Poster 20-23
Longitudinal association between progression of e-cigarette use and smoking cessation behaviors among U.S. adults
Yang, Meng; Hu, Yi-Han; Lin, Hsien-Chang

Background: E-cigarette use is popular among adult smokers. The impact of e-cigarette use on smoking cessation remains controversial due to use of cross-sectional study designs or dissented frequency measures of e-cigarette use. Using e-cigarettes to quit smoking may involve a progression of e-cigarette/cigarette use, from experimenting e-cigarettes, replacement of cigarettes, to cessation of smoking cigarettes. This study examined the association of e-cigarette/cigarette use progression with smoking cessation behaviors among U.S. adults. Methods: This study utilized Waves 1-3 (2013-2016) adult data from the Population Assessment of Tobacco and Health Study (N=6,618). Wave 1 (baseline) relative frequency of cigarette vs. e-cigarette use in past 30 days was used to measure progression of e-cigarette/cigarette use. Two weighted linear regressions and two logistic regressions were conducted to investigate the associations between progression of e-cigarette/cigarette use and four cigarette smoking outcomes at Waves 2-3 (follow-up): 1) quantity of cigarette consumption, 2) frequency of cigarette consumption, 3) cigarette quit attempt, and 4) 1-month abstinence of cigarettes, controlling for sociodemographic factors. Results: Current cigarette smokers who used e-cigarettes more frequently than combustible cigarettes at baseline had lower smoking quantity and frequency at follow-up (β=1.50 cigarettes daily, β=3.36 days monthly, respectively; both ps<0.01), compared to e-cigarette non-users. Logistic regression results showed that current cigarette smokers who used e-cigarettes more frequently than combustible cigarettes at baseline were less likely to reach one-month abstinence at follow-up (OR=0.41, p<0.01) than exclusive combustible cigarette smokers. Conclusions: E-cigarettes as a smoking cessation aid may be effective in reducing smoking quantity and frequency among adults only when e-cigarette use is more frequent than combustible cigarette smoking. However, e-cigarette use may not be effective in reaching abstinence from smoking. E-cigarette use behaviors may be one component when evaluating smoking cessation behaviors; however, recent safety and health concerns about e-cigarette use should also be considered.

Poster 21-27

Impact of Electronic Cigarette Graphic Warning Messages on Perceived Susceptibility and Severity of Explosion and Lung Injuries

Harp, Erica; Rossheim, Matthew; Zhao, Xiaoquan

Background: E-cigarettes are the most prevalent form of tobacco use among U.S. youth and young adults. In recent years, health professionals have learned about new risks from these products. However, little is known regarding how to effectively communicate these risks to the public. The current study tested the effectiveness of e-cigarette explosion and lung injury graphic warning messages.

Methods: 343 young adults (18 to 28 years) were recruited via Amazon Mechanical Turk in October 2020. Participants were randomized to one of six exposure conditions: two images of patients with lung injuries, two images of battery explosion injuries, and two control images of e-cigarette products – one with a message about chemicals and one about nicotine/addiction. The explosion and lung injury images were displayed with the text: "Since 2015, an estimated 3,370 people have been hospitalized from electronic nicotine product explosions in the U.S." and "Last year, 2,807 people were hospitalized for lung injury associated with electronic nicotine product use in the U.S.", respectively. Perceived susceptibility to and perceived severity of e-cigarette lung and explosion injuries were measured before and after exposure to randomized message/image conditions. Linear regression models examined whether exposure conditions were associated with perceived susceptibility and severity of e-cigarette lung injuries and explosion injuries, adjusting for baseline scores and recent e-cigarette use (past 30 days).

Results: Both explosion injury images tested were associated with increased susceptibility to and severity of e-cigarette explosion injuries. One of the two lung injury images was associated with increased perceived susceptibility to and severity of e-cigarette lung injuries. 23% of participants were current e-cigarette users. Current e-cigarette users were less affected by these messages.

Discussion: This study shows that graphic messages with factual statements about prevalence can increase perceived susceptibility to and severity of e-cigarette lung injuries and explosion injuries among young adults.

Poster 21-36

Reasons college students choose not to vape: implications for vaping prevention

Greer, Anna, E; Morgan, Kerry; Samuolis, Jessica; Diaz, Gabrielle; Elimanco, Kylie

Background: The prevalence of vaping among adolescents and young adults is rapidly increasing. A better understanding of reasons why some youth are choosing not to vape is needed.

Purpose: To examine 1) the demographic characteristics of, and 2) reasons for not vaping among, college students attending a mid-sized Northeastern University who reported never trying vaping.

Methods: We used purposive and snowball sampling to recruit 1229 college students (response rate=25%) attending a northeastern US university to complete a questionnaire about vaping. The questionnaire invited students to report demographic characteristics (gender, age, white/nonwhite) vape use status (vaped in prior 30 days, ever tried vaping, never tried vaping). Those who reported never vaping also completed reasons for never vaping using the Vaping Avoidance Scale (VAS). The VAS includes four subscales, each with three items and a possible score ranging from 0 to 15. The four scales were: bad taste (e.g., "the flavors would be unpleasant;" α=.865), fear of cigarette use ("I'm afraid I would want to smoke cigarettes;" α=.873),

health risks ("it would be hazardous to my health;" α=.865) and uncomfortable social interactions ("feel awkward asking to try someone's device;" α=.824). Descriptive and independent t-test statistics were used to analyze the data in SPSS.

Results: Respondents were mostly white (81.1%), females (67.3%) with an average age of 19.73 years (SD=1.39). One-third (32.3%) of respondents reported never vaping. Average scores on the bad taste, cigarette use, health risks, and uncomfortable social interactions subscales were 8.64 (SD=4.43), 5.87 (SD=5.20), 10.95 (SD=4.03), and 8.08 (SD=4.79), respectively. Males had significantly higher scores for bad taste (p=.005) and health risks (p=.001) and females had a significantly higher score for uncomfortable social interactions (p=.031). There were no associations between subscale scores and race (p>.05) or age (p>.05).

Conclusions: These findings can be used by health professionals to prevent initiation of vaping among college students.

Poster 21-45
Tobacco Smoke Exposure Status and Family Resilience among U.S. School-Aged Children
Merianos, Ashley, L; Nabors, Laura, A; Fiser, Kayleigh, A; Mahabee-Gittens, E, M

Purpose: While declines in adult smoking and increases in smoke-free legislation have contributed to decreased tobacco smoke exposure (TSE) over time, about 4-in-10 U.S. school-aged children remain exposed. Limited research has assessed TSE and family resilience, which is the family's capacity to face and adapt to environmental stressors. The study objective was to assess the association between TSE status and family resilience among school-aged children nationwide.

Methods: We used 2017-2018 National Survey of Children's Health data, and included 15,423 children ages 6-11 years. TSE status was defined as not living with a smoker (no TSE), living with a smoker with no home TSE (smoking not allowed inside the home), and living with a smoker with home TSE (smoking allowed inside the home). Multinomial regression analyses were conducted while adjusting for child age, child sex, child race/ethnicity, child health status, number of adverse childhood experiences, parent education level, family structure, and federal poverty level.

Results: About 13% of 6-11-year-olds lived with a smoker with no home TSE while 1.6% lived with a smoker with home TSE. Compared to children with high family resilience scores, children who lived with a smoker with no home TSE were 1.82 times more likely (95%CI=1.23-2.70) to have low family resilience scores, while controlling for the covariates. Children who lived with a smoker with home TSE were at increased odds to have low family resilience scores (aOR=1.29, 95%CI =1.07-1.57) and moderate family resilience scores (aOR=1.28, 95%CI=1.10-1.49), while adjusting for the covariates.

Conclusions: Children who lived with a smoker with no home TSE were at increased likelihood of having low family resilience, and those with home TSE were at distinct odds of having low-to-moderate family resilience. Family-level interventions are needed to increase family resilience and the adoption of voluntary smoking bans in school-aged children's homes nationwide.

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Social Support

Poster 20-01
A Retrospective Examination of a University Success and Wellness Coaching Program
Gatto, Amy; Bleck, Jennifer; DeBate, Rita

Purpose: Success & Wellness Coaching (SWC) provides students with a coach who helps guide, assist, and hold students accountable in order to attain personal goals attainment and adopt desired behaviors. This research analyzes (1) student satisfaction with the coaching intake process, (2) students' relationships with their coaches, and (3) how SWC affects students' self-efficacy to work towards their individual goals. Methods: The final sample included 123 students who had expressed interest in SWC, of which 85 students attended at least one SWC session. Constructs assessed include satisfaction with coach, satisfaction with intake process, usage of coaching services, self-efficacy towards goal achievement, and perceived success of the program. Results: Preliminary analysis revealed that the majority of students who participated in SWC attended 1-5 sessions (M= 4.04 +/- S.D. = 2.86) on a weekly, bi-weekly, or sporadic basis. Regarding the intake process, the majority of students agreed that it was easy to schedule an appointment (88.2%), coaches available (94.6%) and flexible (89.1%) for scheduling, and meeting locations were private (76.9%). In total, 29.5% of participants believed they met their initial goals and 65.4% had begun to make or made progress on their goals. In regards to self-efficacy, the majority felt that SWC increased their confidence (68.4%) and motivation (73.4%) towards reaching their goals. Most students felt that SWC helped them overcome barriers (70.9%) and increased their use of goal setting skills (67.0%) and problem solving skills (59.4%). Overall, 55.7% of student participants felt that SWC helped them change their behavior. Of the SWC participants, over 95% said they would recommend SWC to a friend. Conclusions: SWC is an effective in helping college students identify and work towards their individual goals thus improving student success. Further, these findings provide insight for improving the process implementation of wellness coaching programs at universities.

Poster 21-05
Assessing Factors Related to Social Connection among College Students in a Campus Recovery Program
Nabil, Anas Khurshid; Lim, Eunji; Shigg, Natalie D.; Sosa, Hannah L.; Patterson, Megan S.

Introduction: Research shows that social support/connections have been linked to a variety of health conditions, and play a critical role in long-term recovery from addiction. Especially for college students in recovery, social networks are critical to long-term recovery and academic success. Recovery is defined as: a process of change that enables individuals to improve their overall health. As a result, campus recovery programs (CRPs) are on the rise to help college students fight addiction while also pursuing their college degree. Considering the goal that most CRP's is to socially support students, this study aimed to measure factors associated with social connections created between students involved in a CRP.

Methods: College students involved in a CRP (n=40) completed online surveys measuring their social connections within the program, along with their age, length of sobriety (in months), hours spent in the recovery center per week, and stress, anxiety, and depression scores. Exponential random graph modeling assessed factors related to the presence of social ties between CRP members.

Results: Transitivity (having "friends in common;" PE=1.56, p<.01), being older (PE=0.03, p=.04), having higher stress scores (PE=0.40, p=.04), and spending more time in the recovery center (PE=0.01, p=0.03) was associated with students being connected to others in their network. Contrarily, higher anxiety scores (PE=-0.58, p<.01) and higher lengths of sobriety (PE=0.01, p=.01) were negatively associated with tie presence in this network.

Discussion: This study filled an important gap in the CRP literature, namely by identifying key factors (e.g., participation in the program, length of sobriety, having friends in common) related to social connections created between students in recovery. Results support the use of CRPs in creating social connections for students, rationalizing their promotion and use on college campuses. Future research should examine how these relationships change over time within a student's tenure in a CRP.

Poster 21-30
Online gaming network communication dynamics, depressive symptoms, and social support: longitudinal network analysis
Prochnow, Tyler; Patterson, Megan, S.; Hartnell, Logan; Umstattd Meyer, M. Renee

Purpose: Video games are becoming a daily part of life for most Americans despite public health concerns (e.g., depressive symptoms (DS), social isolation). Preliminary studies show gamers may be compensating for a lack of in-real-life (IRL) support with online connections. This study uses longitudinal social network analysis to investigate the social structure of an online gaming site and how factors such as social support, sense of community, and DS relate to communication dynamics.

Methods: Members (n=40) of an online gaming site reported online and IRL support, sense of community, DS, and usernames of other members whom they spoke to about important life matters in May 2019 and again in March 2020. Separable temporal exponential random graph models (STERGMs) assessed changes in the network over time. STERGMs determine significant factors associated with the presence, formation, and dissolution of social connections over time.

Results: Members were significantly more likely to send communication ties over time if they reported lower IRL support (PE=-0.52, SE=0.18), reported more online support (PE=0.44, SE=0.16), and reported fewer DS (PE=-0.06, SE=0.02). Further, members who reported more IRL support were significantly more likely to dissolve outgoing communication ties over time (PE=-0.06, SE=0.02).

Conclusions: Online gaming provides a unique opportunity for individuals to connect and communicate. Examining the impact of this communication on feelings of support and DS is increasingly important as the popularity of gaming increases. These results are especially timely given the social isolation and mental health impacts related to the COVID-19 pandemic, as this study suggests online connectivity could be a source of support during this socially isolating time.

Poster 21-41

The Association between Social Engagement and Alcohol Use Among U.S. Middle-Aged and Older Adults

Ou, Tzung-Shiang; Huber, Lesa; Lin, Hsien-Chang

Purpose: Alcohol is one of the most commonly used substances among middle-aged and older adults, while alcohol use is associated with falls, impaired driving, unintentional injuries, and health conditions. Older age brings increasing losses across all areas of life, including physical health, social status, and opportunities for social engagement. The loss of social engagement may pose a great risk for problematic drinking. However, few studies have examined the association between social engagement and alcohol use including casual and problematic drinking. This study aimed to investigate the aforementioned associations among U.S middle-aged and older adults using data from a nationally representative longitudinal sample.

Method: This was a retrospective cohort study. Adults aged 50 and older (N=1,939) from the 2008, 2012, and 2016 Health and Retirement Study were included. Two linear mixed-effects regression models were conducted to examine the associations between social engagement and alcohol use measured by past 30-day frequencies of alcohol use and binge drinking, controlling for sociodemographic variables. Age was centered and included as a time-varying variable to capture overtime within-person differences.

Results: A higher level of social engagement was associated with more days of alcohol drinking in a week (β= 0.005, $p<0.05$) when sociodemographic variables were controlled. Additionally, a higher level of social engagement was associated with fewer days of binge drinking (β=-0.067, $p<0.05$).

Conclusions: The study findings suggested that social engagement was possibly associated with social drinking within an acceptable range of alcohol consumption among middle-aged and older adults. Additionally, social engagement could serve as a protective factor of binge drinking among this population. Our finding could add to present knowledge of social engagement, demonstrating the benefit of social engagement among adults age 50 and older on reducing binge drinking. Programs that promote social engagement may have a secondary effect on preventing problematic drinking behavior.

Poster 21-42

The effects of social connections on college student's healthy habits: An egocentric network analysis of undergraduate students

Montour, Tyra; Alexander, Janae, T; Francis, Allison; Goocher, Preslie; Shaw, Victoria; Patterson, Megan

Introduction: Despite exercise being a key contributor to a healthy lifestyle, college students often do not engage in recommended levels. College students' exercise behavior and positive mental health is associated with supportive social connections, which can be developed through campus group exercise programs. This study tested whether mental, social, and behavioral health variables were associated with a college student's supportive social connections.

Methods: An egocentric network analysis was conducted on a sample of undergraduate students (n=465) and their social ties (n=1925). Respondents indicated their exercise behavior, group exercise involvement, and mental health, along with exercise habits and group exercise involvement of their social ties. Respondents also indicated whether their social ties provided

them with health and wellness support. Multilevel modeling assessed factors related to students receiving health and wellness support through their social ties.

Results: Students who reported less stress (β=-0.01, p=.01), and more exercise (β=0.13, p>.01), received more health and wellness support through their social ties. Females (β=0.12, p>;.01) and ties who exercised more (β=0.45, p>.01), provided students more support. Finally, relationships between students and alters who were both involved in the campus group exercise program (β=0.18, p=.04), provided more health and wellness support, despite main effects of group exercise membership for the alter (β=0.09, p=.13) and the student (β=0.03, p=.59) being insignificant.

Discussion: This study fills a gap in literature by identifying factors that relate to social support within college student social networks. Findings suggest a relationship between healthy habits and social support, and campus group exercise programs could be an environment to create reciprocal supportive ties. Future research could explore the effect of connecting students with "peer mentors" who model healthy behaviors and provide support for students.

Poster 21-54
Youth Assets and Successful Transition to Early Adulthood
Oman, Roy, F; Sanchez, Louisiana; Lensch, Taylor; Yang, Yueran

Purpose: A considerable amount of research has found that youth assets protect youth from engaging in health risk behaviors. Much less research has investigated associations between youth assets and positive health-related outcomes. This study's purpose was to investigate prospective associations between 14 specific youth assets (e.g., Responsible Choices, Family Communication, School Connectedness), that are presumed to influence behavior at multiple levels (individual, family, community), and Successful Transition to Early Adulthood (STEA; general health, social support, life satisfaction, and financial health). Methods: Youth participants and their parents (N=1111 youth/parent pairs) were recruited through door-to-door canvassing of stratified (by race/ethnicity and income), randomly-selected census tracts and blocks to participate in a study that assessed prospective associations among the neighborhood environment, youth assets, and youth health-related behaviors. Five waves of data were collected annually over four years. The sample for this analysis included only youth (N=627) who were 18 years or older at wave 5. The STEA variable was dichotomized into higher versus lower STEA based on the median STEA score. Logistic regression, controlling for demographic variables, was conducted to assess prospective associations between youth assets assessed at wave 1 (baseline) and STEA assessed 4 years later at wave 5. Results: Youth participant demographic characteristics were mean age = 19.2 years; 56% female; 42% White, 28% Black, 26% Hispanic, and 5% other race/ethnicity). Nine of the 14 assets were significantly and prospectively associated with higher STEA (significant AORs ranged from 1.44 to 3.07, p<.05). More specifically, 3 individual-, 1 family-, and 5-community-level assets were significantly associated with higher STEA. Conclusions: The results suggest that youth assets, particularly specific individual- and community-level assets, could be the focus of programmatic efforts that have a goal of not only preventing youth participation in health risk behaviors but promoting positive health-related outcomes as well.

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Substance Use

Poster 20-13
Correlates of Positive Drug Expectancies Among Hispanic Adolescents: A test of The Theory of Triadic Influence
Jacobs, Wura; Bartoszek, Lauren; Unger, Jennifer

Purpose. Expectancies toward drug use develop during adolescence. These drug use expectancies are reinforced as they initiate and maintain use. Understanding their development is important for prevention efforts. This study employs the Theory of Triadic Influence (TTI) which articulates the different variables that influence health-related behaviors into streams of influence—intrapersonal, social, and cultural—to better understand factors that influence positive drug use expectancies (PDE) among Hispanic adolescents. Methods. Data for the study came from Project RED which included 1,963 high school students in Southern California. The relationships between participants' drug expectancies and different streams of influence were examined using regression analysis. Results. Participants were mostly females (54.2%); mean age of 17.13 years. In the first model, assessing the cultural stream, controlling for other covariates, there were no variables associated with PDE. Model 2, assessing social environment stream of influence, had a strong association with PDE (adjusted R2=0.25). PDE significantly increased with drug use consequences (β =.48) parent (β= 1.28) and sibling (β = 2.97) alcohol use and peer approval of alcohol use (β =2.0). PDE decreased with increasing parental communication (β =-.22) and peer disapproval of marijuana use (β=-5.2). The third model, including intrapersonal factors was significant (adjusted R2=0.26). Regression showed a significant positive relationship between PDE and drug use consequences (β=.47), parent (β = 1.06) and sibling (β=2.97) alcohol use, peer approval of alcohol use (β=2.05), and stress (β=.23). There was a negative significant relationship with parental communication (β=-.21), peer disapproval of marijuana use (β=-5.2), and depression (β=-.09). Conclusions. Findings from this study help organize and clarify the important influences associated with PDE among Hispanic adolescents. Leveraging the ordering and categorizations suggested by the TTI sheds light on the importance of social streams of influence and what shapes them and could help identify targets for interventions.

Poster 20-24
Patient-Centered Medical Home Enrollment and Associated Substance Use Disorder among U.S. Adolescents: A Propensity-Score Analysis
Ou, Tzung-Shiang; Lin, Hsien-Chang

Purpose: Substance use/misuse and substance use disorder (SUD) have been serious public health concerns among U.S. adolescents. Primary care providers could play an important role in substance use/misuse prevention and treatment. Patient-centered medical home (PCMH) is an innovative model that aims to improve healthcare quality and help patients meet healthcare needs

by transforming primary care. However, it is unclear if PCMH enrollment could be linked to SUD. This study examined the association between PCMH enrollment and SUD among U.S. adolescents. Method: This was a retrospective cross-sectional study. A total of 10,994 adolescents were extracted from the 2017 National Survey on Children's Health. Propensity-score analysis using 1:1 nearest neighbor matching was conducted to reduce potential selection bias between participants who enrolled and did not enroll in a PCMH. A weighted logistic regression was conducted to examine the association between PCMH enrollment and current SUD diagnosis on the matched sample, adjusting for mental health conditions and other covariates guided by the Andersen Model of Healthcare Utilization. Results: A balanced matched sample containing 9,252 participants was achieved (imbalance test: Chi-square=7.16, d.f.=6, p=0.306), suggesting that potential selection bias was reduced. Results from the weighted logistic regression on the matched sample showed that adolescents who enrolled in a PCMH, compared to those who did not, were less likely to report a current SUD diagnosis (OR=0.30, p<0.05), while other mental health conditions were adjusted. Conclusion: This study concluded that PCMH enrollment was associated with a lower likelihood of having SUD among U.S. adolescents. This finding adds to the evidence that integrating patient-centered primary care services with SUD prevention and treatment in an innovative medical home setting may be an effective strategy in reducing SUD among adolescents. Policies that promote PCMH enrollment may have a secondary effect on preventing adolescent substance use.

Poster 20-27
Sociodemographic Factors Related to Concurrent Use of Electronic Cigarettes and Marijuana in a National Sample of College Students
Huang, Shu-Tzu; Vidourek, Rebecca; King, Keith

Purpose: This study aimed to identify sociodemographic factors that were related to the concurrent use of electronic cigarettes and marijuana in the past 30 days among college students in the United States. Methods: The research team conducted a secondary data analysis with Spring 2018 data from the American College Health Association - National College Health Assessment II (ACHA-NCHA II). Participants were college students in the voluntarily participating universities across the country. Logistic regression analyses were performed to examine the relationships between concurrent use of electronic cigarettes and marijuana in the past 30 days and sociodemographic variables including gender, race/ethnicity, grade level, enrollment status, international student status, relationship status, residence type, Greek member affiliation, grades, and participation in college athletics. Results: There were 88,178 college students who completed the survey. The prevalence of concurrent use of e-cigarettes and marijuana in the past 30 days was 5.2% in 2018. Results of the univariate logistic regression analyses revealed that all sociodemographic variables were associated with concurrent use of electronic cigarettes and marijuana. After controlling for the effects of other independent variables, the final multiple logistic regression model indicated that students who were male or of non-binary gender, White, in the 1st or 2nd year, full-time students, not in a relationship, living in college housing, Greek members, with poorer grades, and college athletes were more likely to report using both electronic cigarettes and marijuana in the past 30 days. Conclusions: Over 1 in 20 college students used both electronic cigarettes and marijuana recently that may pose harm to their health. Multiple sociodemographic factors were identified in this study. It is urgently warranted to develop and

implement prevention interventions targeting at-risk populations to address this emerging public health problem.

Poster 21-23
Frequency of Cannabis Use Predicted by Stress and Social Factors Among Women of Childbearing Potential
Crockett, Erica K; Chiaf, Ashleigh L; Croff, Julie M; Wheeler, Denna

Purpose: Cannabis use is associated with other substance use, risk behaviors, and negative health impacts. Understanding the social-demographic variables contributing to cannabis use can help minimize potential harm to the cannabis using population.
Methods: This 28-day study included 165 young adult females who reported past month drinking. All participants were between the ages of 15-24. At baseline, participants responsed to a number of questionnaires including a 6 item Adverse Childhood Experiences (ACES), Children of Alcoholics Screening Test (CAST-6), Brief Young Adult Alcohol Consequences Questionnaire (BYAACQ), and questions about stress. Participants also reported weekly about their cannabis use.
Results: Among this alcohol consuming sample, 44.6% of participants used cannabis while in the study, with 12.8% using frequently. Factors significantly associated with frequency of cannabis use included stress (p=0.001), consequences of alcohol (p=0.001), and early life adversity/adverse childhood experiences (p<0.001).
Conclusions: Our findings suggest that social factors such as stress and alcohol consequences along with developmental influences like ACES have impacts on cannabis use through young adulthood.

Poster 21-48
Using the Reasoned Action Approach to Explore Factors That Influence Pregnant Smokers' Intention to Switch from Combustible Cigarettes to E-Cigarettes
Dobbs, Page, D; Branscum, Paul; Tackett, Alayna, P; Cohn, Amy, M; Comiford, Ashley, L; Luzius, Abbie
AAHB Research Scholars Mentoring Program

Purpose. Pregnancy has been reported as the most influential time for women to quit smoking. Quitting smoking is the primary reason reported by pregnant women for using electronic cigarettes (e-cigarettes). Few studies have explored pregnant women's intention to switch from cigarettes to e-cigarettes. This study used the Reasoned Action Approach (RAA) to examine factors associated with pregnant smokers' intention to switch from cigarettes to e-cigarettes.
Methods. Pregnant women aged 18-40 (n=267; Mage = 29.3, SD = 5.5) who smoked at least one cigarette in the past 30 days completed a national, online, cross-sectional survey about switching from cigarettes to e-cigarettes during pregnancy. Adapted RAA items from previously validated RAA research assessed intention of switching from cigarettes to e-cigarettes during pregnancy. A confirmatory factor analysis confirmed the factor structure of latent factors for each RAA construct, and then structural equation modeling was used to test the theory's application.
Results. After controlling for related items among each construct, the 29-item measure provided acceptable model fit. All standardized factor loadings were significant (.66-.94), and all items

predicted their respective construct. The model explained 65.2% of the variance for intention to switch in the next three months, and latent variables instrumental attitude (p<.001) and descriptive norms (p<.001) predicted intention.

Conclusion. Health educators could use identified RAA constructs as interventional targets in future research and education. In this sample, believing e-cigarette use to be good or better than combustible cigarettes (instrumental attitudes) and believing other pregnant women who smoke will switch during pregnancy (descriptive norms) increased intention to switch. Previous research has shown that 14.5% of pregnant women who smoke quit using all tobacco products during pregnancy, compared to 1.2% who switch to e-cigarettes. Thus, prenatal education focused on providing facts regarding tobacco/nicotine use during pregnancy could be effective in reducing tobacco/nicotine use during pregnancy.