Health Disparities: 124-130

124.

Sociodemographic Disparities in Patient Experience Among Young and Older US Adults
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Purpose: Experience of healthcare in early adulthood may influence lifelong attitudes to health and health-seeking behaviour. Poor healthcare experience may be a key contributing factor to health disparities. This study investigates disparities in patient experience by household income and race/ethnicity among younger and older American adults.

Methods: We used logistic regression to compare the proportion of young/older adults among different sociodemographic groups who reported positive healthcare experience in the Consumer Assessment of Healthcare Providers and Systems survey (CAHPS). Participants: Adults in the Medical Expenditure Panel Survey 2008 (1333 aged 18-24, 11986 aged over 25). Principal variables: Age, household income quintile (derived from ranking the percentage of poverty level for family composition), and race/ethnicity (Hispanic, Black, Asian, Other (including non-Hispanic White)). Covariates: Sex, number of care episodes. Outcomes: A dichotomous outcome was created for overall care rating (0-8 vs. 9-10 on a scale of 0-10). Additionally, participants reported whether, over the previous year, healthcare providers had always: listened, explained clearly, respected them, and spent enough time. Models: Within each age group, unadjusted models compared patient experience by income and race. Adjusted models used all covariates and investigated interactions between age and income/race.

Results: Young adults reported poorer patient experience than older adults on all outcomes (Overall rating 40.6 vs. 49.6% (Odds ratio=0.69 (95% CI 0.62-0.78), p<.001); Listening 54.8 vs. 59.7% (p=.001); Explaining 52.6 vs. 59.9% (p<.001); Respect 59.3 vs. 62.7% (p=.02); Time 44.3 vs. 49.7% (p<.001)). For each outcome, younger age remained significantly associated with poorer care (p<.05) after adjusting for all covariates. Among young adults, the second poorest quintile reported the worst experience of care, with significantly lower proportions reporting each outcome than the richest quintile (Overall Rating 35.9 vs. 46.7% (p=.02 ); Listening 48.9 vs. 62.4% (p=.003); Explaining 47.3 vs. 62.0% (p=.001); Respect 55.8 vs. 65.8% (p=.02); Time 39.0 vs. 55.8% (p<.001)). These remained significant (p<.02) in the adjusted model. For all outcomes, there was a significant interaction between age and income, with greater disparity in patient experience between income groups among young adults (p<.05). Compared to the 'Other' group, young Asian-Americans reported poorer experience on all measures except for Explaining, and these differences remained significant in the adjusted model (p<=.03). Differences were also seen between Hispanics and Others but the effect disappeared or was of marginal significance in the adjusted model. For Overall Rating and Respect, the difference between Asians and Others was greater among young adults than older adults (both p=.03).

Conclusions: Patient experience is consistently poorer, and disparities greater, among younger compared to older adults. This underlines the importance of recent initiatives to address inequity and improve the quality of U.S. healthcare for adolescents and young adults of all racial and ethnic origins.
125.

How Might Racism Impact African American Children’s Thoughts and Plans For the Future?
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Purpose: Children’s academic investment and future planning are important determinants of educational attainment, socioeconomic status, and future health. Studies have shown that social determinants of health can contribute to health disparities. Few studies have shown how social stigma can impact health through the internalization of negative interpersonal judgments by one’s experience or perception of racism. Among African Americans, community connectedness has been undermined by structurally-embedded stressors and inequities (e.g., poverty; disproportionate incarceration; discrimination), and care givers and community members may embrace or reject academic achievement, a goal that is valued by the larger, dominant The purpose of this study is to examine associations between different facets of African American racial identity (community connectedness, embedded achievement, awareness of racism) and children’s uncertainty about the future and academic investment.

Methods: Study participants (n=46 families) were African American caregivers and children aged 8-12 years (M=10.3, SD=1.4), recruited from an urban elementary school in the Midwest. The majority of caregivers (95.7%) and 21 children (45.7%) were female. The experience of being African American was assessed through Oyserman and colleagues’ (2007) Racial Identity Scales: Connectedness, the extent to which the child feels a positive sense of connection to the African American community; Embedded achievement, the extent to which family members believe that the child’s achievement is valued by the African American community; Awareness of racism, the extent to which family members perceive that others view the child through a lens of low, negative expectations. Children’s uncertainty about the future was assessed through items developed by Bolland and colleagues (2001). Children’s academic investment was assessed through items developed by the National Center for School Engagement (2006). Analyses examined the distribution of study variables and correlations between variables, adjusting for child’s age and gender.

Results: When caregivers reported greater embedded achievement (r=-.30) and greater racism directed towards their child (r=-.32), children reported less connectedness to the African American community. Caregivers’ report of racism was additionally associated with children’s intent to graduate from high school and attend college (r=.32). When children reported greater racism directed towards themselves, they reported greater uncertainty about what the future held (r=.40). Children who reported greater connectedness to the African American community also reported greater overall academic investment (r=.45).
Conclusions: Awareness of racism among African American families may impact children in different ways. Children may feel less connected to their community, potentially due to stigmatization, and less certain about what the future holds; they may also address racism through becoming more academically invested. Associations involving embedded achievement suggest that caregivers and children may define the African American community in different ways. Open dialogue about African American racial identity within families, communities, and our broader society may foster resilience among children and promote their well-being and future success across the lifespan.

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126.

Physical Activity Comparisons Among Adolescents of Somali, Other Non-Hispanic Black and White Race
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Purpose: African American adolescents, particularly girls, are less active than their non-Hispanic white peers. However, little is known about how the physical activity levels and behaviors of ethnic sub-populations of non-Hispanic black adolescents, such as the Somali population, compare to their peers. A greater understanding of Somali adolescents' physical activity is important to inform culturally tailored clinical care and interventions. The purpose of this study was to compare moderate-to-vigorous physical activity (MVPA), as well as the prevalence and frequency of participating in different types of physical activities among Somali, other non-Hispanic black, and non-Hispanic white adolescents.

Methods: The current study includes a subsample of 1,268 participants (mean age 14.6, SD= 2.1; 51% female) who participated in EAT 2010 (Eating and Activity in Teens), representing Somali (9%), other non-Hispanic black (not Somali or Ethiopian) (51%), and non-Hispanic white (40%) adolescents. Participants were middle and high school students at Minneapolis/St. Paul, MN, public schools and completed survey assessments of overall leisure-time MVPA and participation in 26 different types of physical activities. Linear and logistic regressions were used to examine disparities in MVPA and participation in each type of physical activity among the three race groups. All analyses were stratified by gender, and controlled for age, socioeconomic status, nativity, and BMI.

Results: There were no significant differences in MVPA (mean= 7.4 h/w) among Somali, black, and white adolescent boys. White girls reported significantly higher MVPA levels (6.2 h/w) than black (5.1 h/w, p<0.001) or Somali (3.9 h/w, p = .02) girls. Of the 26 physical activities, there were significant differences between Somalis and the other races groups for 9 activities among the boys, and 7 activities among the girls. For example, Somali boys participated in more dance compared to white boys, and less walking for transportation compared to black and white boys. Somali girls participated in more soccer compared to white girls. Among the adolescents participating in each
physical activity, there were few significant differences in the number of hours of participation for the three race groups.

**Conclusions:** There are similarities and differences of MVPA and physical activity participation among Somali, other non-Hispanic black and white adolescents. Awareness of both is important for informing clinicians’ and researchers’ culturally tailored care and interventions. Also, among the adolescents participating each activity, there is little difference in their participation rates—suggesting access is imperative.

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127.

**Adolescent Food Insecurity and the Burden of Health-Related Social Problems**

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**Purpose:** Health-related social problems (HRSP) such as food insecurity and homelessness directly impact adolescent health. Food insecurity in adolescents has been linked with decreased healthcare access and increased school behavioral problems and mental health disorders. Little is known about the relationship between severity of food insecurity and the prevalence of other HRSP. The aim of this study was to examine the association between level of food insecurity and type and cumulative burden of other HRSP in an adolescent clinic.

**Methods:** Patients aged 15-25 years from an urban adolescent clinic completed a web-based screening and referral tool for HRSP. Validated questions were used to identify problems in seven social domains (food security, healthcare access, education, housing, income security, substance use and interpersonal violence). Two versions of the USDA Food Security Survey Module were used to determine food insecurity: participants ages 18-25 years completed the adult survey, and ages 15-17 years completed the youth survey. Per USDA scoring guidelines, responses were coded as high (HFS), marginal (MFS), low (LFS) and very low (VLFS) food security. Chi Square and Kruskall-Wallis tests were used to assess the association between food security classification and domain and number of HRSPs, respectively. Logistic regression models controlled for age, gender, and race in testing the association between food security and each HRSP domain.

**Results:** Among 400 patients (mean age 18 ± 2 years; 69% female; 54% Black; 43% public insurance), 211 (52.7%) had HFS, 59 (14.7%) had MFS, 70 (17.5%) had LFS, and 60 (15.0%) had VLFS. There were no significant differences in level of food security by gender or race/ethnicity, but older participants had the greatest degree of food insecurity (p=0.01). The total number of HRSP was significantly associated with increasing food insecurity (p < 0.0001); HFS and MFS participants had a median of 1 problem in
comparison to 2 and 3 problems in participants with LFS and VLFS. As food insecurity increased from HFS to MFS, LFW, VLFS, participants reported greater problems with healthcare (26%, 41%, 49%, 58%, respectively; p<0.0001), housing (24%, 34%, 49%, 50%; p<0.0001), substance use (12%, 25%, 24%, 38%; p<0.0001), education (9%, 12%, 19%, 27%; p=0.003), and income security (6%, 12%, 17%, 15%; p=0.03). In adjusted analyses, greater food insecurity was significantly associated with the presence of a HRSP in 4 different domains; participants with VLFS had significantly increased likelihood of a problem with education (aOR=3.9, 95%CI=1.8-8.5, p=0.007), healthcare (aOR=3.7, 2.0-6.9, p=0.01), housing (aOR=3.3, 1.7-6.0, p=0.03), and substance use (aOR=4.5, 2.3-9.2, p=0.009) compared to those who were HFS.

**Conclusions:** In our sample of youth receiving care in an urban adolescent clinic, 33% had LFS or VLFS, and food insecurity and burden of HRSP were strongly related. Patients with food insecurity are more likely to experience problems with healthcare access, housing, education, substance use and income security. Enhanced screening for food insecurity and other social problems, along with referral for resources, is critical for adolescent and young adult comprehensive healthcare.

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**128.**

**Health in Schools Study (HIS): Gender Differences in School-based Health Center Use**

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**Purpose:** There is a paucity of research documenting youth’s perceptions of health care services in school-based health centers (SBHC). While studies have found that female youth use SBHCs more frequently and male youth are under-utilizers of SBHC, we have little information about youth’s attitudes about seeking care in these settings.

**Methods:** Participants were 38 adolescents (21 female, 18 male) from three local high schools which have a SBHC in the Seattle Metropolitan area. Participants completed an online survey which assessed demographic information, health-care utilization, attitudes and stigma associated with SBHC use. Gender differences were assessed using Fisher’s exact test.

**Results:** Participants were mostly white youth with a median age of 15.7 years. Half of the respondents were in the 9th grade. Overall, 57% of youth reported use of the SBHC in the past year. Most youth reported that they usually sought health care from traditional medical settings (Hospital-based clinic/ER; Private practice/HMO; 92%) rather than SBHCs (8%). The vast majority of youth across genders reported that if they had a choice, they would go to non-SBHC settings for their health care (95%). Also, 32% of youth worried that their parents would find out why they went to the SBHC, and 19% of youth reported
that they would feel embarrassed by using the SBHC. In the past year, 24% of males and 81% of females had been seen at the SBHC, a statistically significant difference (p = .0008). Among frequent users of SBHCs (those who had attended 3 or more times in the past year), 33% were female and 6% were male (p = .0049). Across genders, a high proportion of youth perceived that females used the SBHCs more frequently than males (86%) and 19% of youth believed that SBHCs are for reproductive care only. Attitudes about SBHCs were generally similar across males and females.

**Conclusions:** The results of this study show that regardless of gender, youth in this study would choose not use the SBHC for health care and prefer other centers. In addition, our results are consistent with other studies that more females utilize the SBHCs verses males. Although SBHCs have been shown to be ideal centers for adolescents to utilize health care resources, they may not be the youth’s first choice. Further research is needed to understand youth behaviors associated with increased utilization of SBHCs especially in the adolescent male.

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### Results of the Love Your Heart Study: A Culturally-adapted Internet-enhanced Physical Activity Promotion Program for Overweight and Obese African American College Females

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**Purpose:** African American (AA) women are one of the least active demographic groups in the U.S. with only 36% meeting the national physical activity (PA) recommendations. PA begins to decline in AA women in adolescence and continues to decline in young adulthood. Yet, few interventions have been developed to promote PA in adolescent AA girls as they emerge into young adulthood. Clearly, this represents a missed opportunity. The purpose of this study was to evaluate a culturally-relevant, Social Cognitive Theory (SCT) based, Internet-enhanced PA promotion program tool developed for AA young adult women enrolled in college.

**Methods:** A 3-month, single group, pre-post test design was used. Participants used a culturally-relevant SCT based PA promotion website while engaging in a minimum of 4 four moderate intensity PA sessions each week. The website was designed specifically for the current study. Website development was guided by formative research conducted with overweight and obese AA female college students. Weekly PA sessions required participants to walk at a moderate intensity pace at the indoor track at the University twice per week. For the remaining two sessions, participants could attend a cardiovascular-based group exercise class sponsored by the university (i.e. Zumba, kick-boxing etc.). Physical activity, body mass index, and associated SCT variables were assessed at baseline and 3 months.
**Results:** Participants (n=31) had a mean age 21.3 years (SD=3.1 years) and were mostly obese (BMI=32.8, SD=5.7). In comparison to baseline, participants completing the study (n=25) reported a significant decrease in sedentary behavior (P<.0001) and a positive trend for increased PA (P=.150). Participants also reported a significant increase in self-regulation for PA (P<.0001) and marginally significant increases in social support (P=.052) and outcome expectations (P=.057) for PA. No changes in BMI (P=.162), enjoyment of PA (P=.151), or exercise self-efficacy (P=.086) were observed. Post-intervention consumer satisfaction among study completers was favorable with all participants (n=25) being “somewhat” to “very satisfied” with the study, 92% (n=23) reported the study website as being “somewhat” to “very helpful” for promoting physical activity, and 76% (n=20) indicated they would recommend that study to a friend.

**Conclusions:** Findings provide preliminary support for the use of a culturally relevant theory based Internet-enhanced PA promotion tool in young adult AA women. Successful promotion of PA in college aged AA women as they emerge into adulthood could result in the development of life-long healthy PA patterns which may ultimately reduce PA-related health disparities in this high risk underserved population. Future studies with larger samples are needed to further explore the use of Internet-based programs to promote sustained PA in this population.

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**130.**

**Disparities in Access to Care among Students Using School-Based Health Centers**

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**Purpose:** Access to care is at the forefront of the nation’s healthcare policy agenda, and evidence has shown that access to regular primary and preventive care among adolescents is critical for improving health outcomes into adulthood. Despite this, many adolescents continue to experience disparate access and unmet health needs. School-based health centers (SBHC) are a unique model for providing equitable services for youth; however, few large-scale studies have been conducted to assess their impact in this regard. The purpose of this study is to investigate disparities in access to care among adolescent SBHC users.

**Methods:** A cross-sectional, quantitative analysis was performed using data generated from the Bureau of Primary Care Healthy Schools, Healthy Communities User Study, which was administered to a nationally-representative sample of 414 adolescents. Six outcome measures captured access to care; specifically, having a usual source of care and reporting unmet health needs. Multivariate logistic regression models examined the effects of sociodemographic and self-reported user health status characteristics on outcome variables.
**Results:** Analyses showed that disparities by race/ethnicity and insurance status that are typically reported among adolescents seeking care from traditional primary care settings were not present among SBHC users. However, females were 2.81 times more likely than males to report unmet needs for prescription medication (p<0.05) and 8.15 times more likely to report unmet needs for mental healthcare (p<0.01). Additionally, adolescents who were diabetic, overweight, or had a mental health or serious emotional concern experienced disparities in reporting unmet needs. Most notably, adolescents with at least one mental health-related concern were 12.13 times more likely than those without to report unmet needs for prescription medication (p<0.01); while those with a self-reported serious emotional problem were 5.98 times more likely to report unmet needs for mental healthcare (p<0.05).

**Conclusions:** In general, SBHCs appear to offer equitable access to care by ensuring that no differences in access exist between adolescent users. However, differences in unmet needs for prescription medication and mental healthcare suggest that care continuity and comprehensiveness could be improved before all disparities are eliminated. In particular, findings suggest that the provision of reproductive and mental health services must be bolstered in order to fulfill the needs of adolescents in a safe and effective manner. Overall, study results are encouraging and inform policy efforts to support SBHCs as a critical part of the safety net for adolescents.

**Sources of Support:** This study was conducted as part of the primary author’s doctoral dissertation work.