CHILD BRIDES: SOCIODEMOGRAPHIC FACTORS, HEALTH VARIABLES, AND ATTITUDES ASSOCIATED WITH MARRYING BEFORE 18 YEARS OLD IN THE UNITED STATES

Anita Vasudevan, BS, May Lau, MD, MPH
University of Texas Southwestern Medical Center

Purpose: Child marriage, defined as marriage before 18 years old, continues to be legal with judicial and parental consent and practiced in 49 states in the United States (U.S.). Worldwide, child marriage results in negative socioeconomic and health outcomes for women. This study examined multiple variables associated with those who were married under 18 years old in the U.S.

Methods: This study analyzed data from the National Survey of Family Growth from 2011 to 2015. Child marriage was defined as the respondents' first marriage occurring before 18 years old. The control group was women whose first marriage occurred ≥ 18 years old. Bivariate and multivariable analyses were used to compare sociodemographic factors, parental factors, and health variables between women with and without history of child marriage.

Results: Almost 6% of women who had been married at least once were married before 18 years old. In bivariate analyses, women with a history of child marriage were more likely to be Latino (42% of child marriage group vs 17% of control group, p < 0.01), be born outside of the U.S. (30% vs 20%, p < 0.01), have a lower income (100-199% of poverty level vs 200-299% of poverty level, p < 0.01), have a mother who had her first child before 18 years old (31% vs 15%, p < 0.01), be forced to have vaginal sex (25% vs 14%, p < 0.01), believe that marriage has not worked out for most people they know (51% vs 31%, p < 0.01), and believe that divorce is the best solution when a couple cannot work out marital problems (53% vs 33%, p < 0.01). Women with a history of child marriage were less likely to have had an intact family until 18 years old (51% of child marriage group vs 63% of control group, p < 0.01), have a usual place to go for health advice (80% vs 89%, p < 0.01), report having excellent health (22% vs 29%, p < 0.01), and believe that same sex couples should have the right to adopt children (61% vs 73%, p < 0.01). In multivariable analysis, compared with white women, Latino women had double the odds of marrying before 18 years old. Living in the South and having ≤ 9th grade education was associated with double the odds of marrying before 18 years old. Older age at first sexual intercourse and being African American was associated with lower odds of being married before 18 years old.

Conclusions: Child marriage in the U.S. is more common among Latino women and women living in the South, and less common in African Americans. Child marriage in the U.S. is associated with lower education, and increased likelihood to ever have been forced to have sexual intercourse. Future research should analyze why child marriage is more common among these populations, as prevention of child marriage may improve outcomes for women.

Sources of Support: None.
TRANSCULTURAL PERSPECTIVES OF MENTAL ILLNESS STIGMA ACROSS RACE, ETHNICITY, AND GENDER AMONG ADOLESCENTS IN TEXAS

Melissa J. DuPont-Reyes, PhD, MPH1, Alice Villatoro, PhD1, Jo C. Phelan, PhD2, Kris Painter, PhD, LCSW3, Bruce Link, PhD, MS4

1The Latino Research Initiative at The University of Texas at Austin; 2Columbia University; 3Substance Abuse and Mental Health Services Administration; 4University of California, Riverside

Purpose: Mental illness (MI) stigma is a significant barrier to seeking mental health treatment. Whether these stigma-related attitudes are distributed evenly across race, ethnicity, and gender in adolescent populations is unknown. Understanding these patterns early in the life course can help identify specific cultural considerations when planning and implementing public anti-stigma efforts. Furthermore, it may help reduce disparities in treatment. The current study examines race, ethnicity, and gender differences in MI-stigma longitudinally among adolescents.

Methods: An ethnically and socioeconomically diverse sample (N=319) from Texas (2011-2015) completed self-administered surveys in sixth- and eighth-grade that assessed MI-stigma. Participants also responded to similar questions about adolescent vignette characters described as having bipolar (Julia) and social anxiety (David) disorder. Linear regression models adjusting for personal and family characteristics examined race, ethnic, and gender differences in MI-stigma using an intersectional framework. Race, ethnicity, and gender were combined to generate composite identities (e.g., Latino boys or non-Latino black girls). Outcomes examined included: 1) knowledge/positive attitudes; 2) awareness/action; 3) social distance from peers with MI; and 4) avoidance/discomfort of persons with MI. Similar vignette-based outcomes were examined including if Julia/David is a bad person, if their condition would improve with treatment, and desired social distance from the character. Multiple comparison tests between race, ethnicity, and gender composite variables showed all significant differences across groups occurred with non-Latina white girls as the referent.

Results: In sixth-grade, non-Latino black boys and Latina girls reported less MI-related knowledge/positive attitudes and awareness/action compared to non-Latina white girls. While Latino boys reported significantly greater avoidance/discomfort compared to non-Latina white girls, non-Latino black boys and Latina girls desired more social distance from people with MI. These patterns persisted in eighth-grade, though only significant among Latino boys compared to non-Latina white girls for the avoidance/discomfort outcome. For the vignette-based outcomes in sixth-grade, non-Latino black boys compared to non-Latina white girls were more likely to believe each character was a bad person. Compared to non-Latina white girls, non-Latino black boys and Latino boys and girls reported significantly greater social distance from Julia, and non-Latino black boys and Latina girls reported significantly greater social distance from David. Further, although non-Latino white boys compared to their female counterparts were more likely to believe Julia would improve with treatment, they reported greater social distance from Julia. The patterns for the Julia character persisted in eighth-grade: non-Latino black boys were more likely to believe Julia was a bad person and would not improve with treatment, whereas Latino boys reported greater social distance towards Julia compared to non-Latina white girls. In eighth-grade, there were no differences between non-Latina white boys and girls in their belief that Julia’s condition would improve with treatment.

Conclusions: Race, ethnic, and gender differences in MI-stigma emerge in preadolescence and persist two years later, particularly for non-Latino black boys and Latina/o adolescents. These differences may contribute to variation in mental healthcare utilization later on. Tailoring interventions to address stigma differences across these intersections is required for reducing stigma in the population and improving treatment utilization among underserved adolescents. Sources of Support: NIMH-#R01MH095254; NIMH-#5-T32-MH13043
SUSTAINING NON-VIOLENCE AMONG ADOLESCENTS AND YOUNG ADULTS IN A LATINO COMMUNITY
Manuel Ángel Oscós-Sánchez, MD, Janna Lesser, RN, PhD, Luz Dolores Oscós-Flores, BSEd
The University of Texas Health Science Center at San Antonio

Purpose: Violence remains the leading cause of death among adolescents and young adults in the Americas. One prevention strategy is to identify and sustain factors that already exert protective effects. Bivariate analyses using trichotomization determined if 16 potential factors had protective and/or risk relationships with NOT perpetrating violence. A logistic regression model determined variables most strongly correlated with non-violence.

Methods: Adolescents and young adults in one predominantly Latino urban community completed self-administered surveys prior to participation in a prevention program. Participants reported race/ethnicity, gender, age, and perpetration of 20 potential acts of violence in the last 30 days. 14 potential factors were measured with scales. Marijuana and alcohol use were each assessed with one survey item. Participants reporting no act of violence were classified as non-violent. To determine whether factors had protective and/or risk relationships with non-violence, bivariate analyses used trichotomization to compare at both ends of the distribution. Tests to identify protective factors compared the top 25% with the middle 50%; tests to identify risk factors compared the lower 25% with the middle 50%. If a variable only had a significant effect (p<.05) at one end it was classified only as either a protective or risk factor. In a forward stepwise logistic regression model the dependent variable was the dichotomous non-violent outcome. Variables with significant protective and/or risk effects in the bivariate analyses were used in the regression model.

Results: 464 participants. 86% Latino; 54% female; 25% 10-12, 53% 13-17, and 22% 18-23 years old. 27% were non-violent. Five variables had both protective and risk effects (p<.05): thoughtful decision making, parental support of violence, hyperactive-impulsive symptoms, inattentive symptoms, and depression symptoms. Seven variables had protective effects only: low exposure to community violence, low belief in aggression, high belief in non-violent conflict resolution, more academic behaviors, high academic achievement motivation, high presence of peer support, and no use of marijuana. Two variables had risk effects only: low presence of adult support and low sense of purpose. Parental support of non-violence (p>.07) and no alcohol use (p=.20) were not associated with non-violence. Five variables and age remained in the final regression model. High thoughtful decision making (p<.001), low parental support of violence (p=.002), low hyperactive-impulsive symptoms (p<.001), low inattentive symptoms (p=.013), and low exposure to community violence (p=.001) increased the likelihood of being non-violent.

Conclusions: Multiple protective factors were identified and can be reinforced to maintain non-violence. One strategy to help young people remain non-violent would be to engage parents in working toward creating and sustaining non-violent communities where youth can engage in their natural routine of thoughtful decision making. Another strategy is to provide effective care for young people with ADHD.

Sources of Support: The Texas Department of State Health Services
EXPLORING FACTORS ASSOCIATED WITH EARLY SEX ONSET AMONG URBAN YOUNG MEN AGED 15-24: THE IMPORTANT ROLE OF PARENTS AND PARTNERS

Asari Offiong, MPH, CPP, Laura Lindberg, PhD, Jacky Jennings, PhD, MPH, Patricia Dittus, PhD, Arik Marcell, MD, MPH

1Johns Hopkins University Bloomberg School of Public Health; 2Guttmacher Institute; 3Johns Hopkins University School of Medicine; 4Centers for Disease Control and Prevention

Purpose: Research suggests that about 30% of urban Black male adolescents report first sex younger than age 13. Considering physical and neurological development during early adolescence, a natural question is when is it too early for adolescents to have sex? Very early sex may challenge social norms and for some, suggest coercive experiences. It also challenges how parents, teachers and practitioners approach early sex education for boys. To gain a better understanding of the context of early sexual experiences, we explored partner-, personal-, and parent-level factors associated with early sex onset among Black male adolescents aged 15-24.

Methods: Cross-sectional sample of male patients aged 15-24 recruited from three primary care and two STD clinics in one urban mid-Atlantic city. From 08/14-09/17, data were collected for ~2 weeks at each clinic over five rounds. Among eligible participants, 493 enrolled (participation rate=70%) were asked about their age of first sex (outcome), demographic, sexual and reproductive health (SRH) characteristics. The last round (08/17-09/17; analytic sample n=66) also assessed contextual-level factors of the first sex experience at partner- (i.e., “much older/younger” aged partner, relationship status, sex wantedness, sex decision-making), personal- (i.e., perceived knowledge about sex, peer norms, masculinity beliefs and traits), and parent-levels (i.e., parent/guardian closeness, relationship satisfaction, and supervision, perceived parents'/guardians’ beliefs about sex). Frequencies and cross-tabs of participants’ characteristics by first sex at 13 or younger (early sex onset) versus later onset were generated. Pearson chi-squared tests were conducted to explore associations between early sex onset with participants’ characteristics and contextual-level factors.

Results: Across all rounds, 29% of males aged 15-24 reported early sex onset, which varied only by pregnancy history; a higher proportion with early onset (61%) were involved in a pregnancy than later onset (41%) (p<.001). Contextual factors at early sex onset experience included 50% of partners were hookups, 43% had “much older” partner, 57% did not want it to happen/had mixed feelings, 71% made joint decision with partner to have sex, 57% felt closer to partner, 64% had sex with partner again, 57% did not know what they were doing, and 71% held traditional masculine beliefs. Less than half felt close or satisfied with parent/guardian relationships. Partner age, perceived knowledge about sex, and parental relationships were associated with early sex onset: a higher proportion self-reported a “much older” first partner than later onset males (43% vs. 9%; p=.038) and lacked knowledge about sex (57% vs. 28%; p=.046); a lower proportion reported being close (43%) or relationship satisfaction with their maternal (50%), and paternal (31%) parent/guardian than later onset males (72%, 83%, and 68%, respectively) (p=.046, p=.013; and p=.016, respectively).

Conclusions: Findings suggest that early sex onset among Black males is connected to lack of strong parental ties and older sexual partners playing influential roles in encouraging early sexual behavior. While young men may not be more likely to report early first sex as unwanted, their ability to make informed, autonomous decisions with older partners requires further investigation.

Sources of Support: CDC 1H25PS003796 and Secretary’s Minority AIDS Initiative Fund
INVESTIGATING THE RATES OF RECEIPT OF FAMILY PLANNING SERVICES AND RECEIPT OF SEXUAL HEALTH EDUCATION AMONGST FEMALE ADOLESCENTS IN THE UNITED STATES AND THE IMPACT OF RACE AND ETHNICITY

Noushine Sadeghi, BS1, Gia M. Badolato, MPH2, Monika K. Goyal, MD, MSCE2

1George Washington University; 2Children’s National Health System

Purpose: The United States has the highest rate of adolescent pregnancy of any of the world's developed nations with adolescents experiencing many barriers to receipt of sexual health care and education. Although adolescent pregnancy rates in the US have recently declined, minorities are disproportionately affected by unintended pregnancy. The purpose of this study was to explore racial/ethnic differences in receipt of sexual health services and education among a nationally representative sample of adolescent females.

Methods: We conducted a repeated cross-sectional study of females aged 15 to 21 years who participated in the National Survey of Family Growth study from 2008-2015. Race/ethnicity was categorized into the following groups: white-non-Hispanic (NH), black-NH, Hispanic or other-NH. We described racial/ethnic differences in sexual experience, pregnancy rates, and of contraceptive use. We examined racial/ethnic differences in: (1) sexual health services received within the last 12 months; (2) being asked about condom use by a clinician; and (3) receipt of formal sex education before the age of 18. Multivariable logistic regression was used to measure the association between race/ethnicity and the previously mentioned services after adjustment for potential confounders.

Results: Our sample included 4,316 participants representing 33,510,507 females with a mean age of 18.1 years. Almost half (47.5%) reported being sexually experienced with black-NH females more likely to be sexually experienced compared to white-NH females (aOR 1.4; 95% CI 1.1, 1.8). Furthermore, black-NH and Hispanic females had higher rates of pregnancy compared to white-NH participants (aOR 2.1 [1.4, 3.0] and aOR 2.0 [1.5, 2.8], respectively). Of the participants who reported being sexually experienced in the last 12 months, black-NH and Hispanic females were also more likely to use the least effective or no forms of contraception (aOR 2.7 [1.7, 4.2] and aOR 1.7 [1.2, 2.4]), respectively) than white-NH females. Less than half of the participants (44.7%) received birth control services in the last 12 months, and this varied by race/ethnicity. Compared to whites-NH participants, black-NH and Hispanics were less likely to have obtained a service regarding birth control (aOR 0.6 [0.5, 0.8] and aOR 0.7 [0.5, 0.9]) respectively. Few (14.3%) participants reported that clinicians asked about condom use. Overall, 44.7% reported receipt of education on condom use before the age of 18, with Hispanics more likely to receive this education when compared to white-NH (aOR 1.5 [1.2, 1.9]).

Conclusions: In a nationwide sample of adolescent females, we found higher rates of sexual experience, pregnancy, and utilization of the least effective methods of contraception among minority females. Furthermore, we identified lower rates of receiving a service regarding birth control amongst black-NH females and Hispanic females, although Hispanics had a higher rate of education on condom use than NH-white females. The results from this study support the need for the development of interventions that explore pregnancy prevention interventions in order to increase all adolescents’ access to sexual health services.

Sources of Support: National Institute of Child Health and Human Development (NICHD) K23 award (HD070910) (M.K.G)
Purpose: The economic and social conditions in which high school students live and learn (i.e., social determinants of health [SDOH]) influence both academic achievement and health outcomes. Although the Youth Risk Behavior Survey (YRBS) is the longest established, nationally representative, comprehensive surveillance system monitoring health-related behaviors among high school students, the survey does not include individual-level indicators for SDOH. This is the first study to stratify YRBS data by school-level socio-economic status (SES) and urbanicity to examine their association with sexual health behaviors.

Methods: The national YRBS is a cross-sectional survey conducted biennially among a nationally representative sample of public and private students in grades 9–12. YRBS data from 2015 (N= 15,624, response rate= 60%) and 2017 (N= 14,765, response rate= 60%) were combined, and then linked with extant data to identify school-level estimates for SES (percentage of students eligible for free- and reduced-price meals [%FRPM]) and urbanicity (urban, suburban/town, or rural) among students attending public schools. %FRPM was categorized as low poverty (25% of students or less), average (26%-75%), and high poverty (more than 75%). This study examined whether sexual health behaviors (currently sexually active, 4+ lifetime sexual partners, condom use during last sexual intercourse, hormonal birth control during last sexual intercourse, condom and hormonal birth control during last sexual intercourse [dual use protection], and drank alcohol or used drugs before last sexual intercourse) varied by %FRPM and urbanicity. Adjusted Prevalence Ratios (APR) were calculated using logistic regression models that controlled for sex, race/ethnicity, and grade. Associations were considered significant at p <0.05 level.

Results: Compared to students in low poverty schools, students in average (APR=1.33, 95% CI= 1.17-1.51) and high poverty schools (1.44, 1.19-1.73) were more likely to be sexually active, and students in average (1.44, 1.16-1.78) and high poverty schools (1.68, 1.22-2.32) were more likely to have four or more sexual partners. Compared to students in low poverty schools, students in high poverty schools were less likely to use a condom (0.84, 0.74-0.96) or hormonal birth control (0.78, 0.64-0.96) during last sexual intercourse, and students in average (0.79, 0.64-0.97) and high poverty schools (0.71, 0.54-0.94) were less likely to have used alcohol or drugs during last sex. Some sexual health behaviors differed by urbanicity. Compared to students in rural schools, students in suburban/town schools were less likely to be sexually active (0.89, 0.80-0.98); and students in urban schools were less likely to have used hormonal birth control (0.85, 0.73-0.99) and dual use protection (0.72, 0.56-0.92) during last sexual intercourse.

Conclusions: High school students attending rural or high poverty schools have a higher prevalence of some sexual health behaviors that increase their risk for teen pregnancy and STIs, including HIV/AIDS. The Centers for Disease Control and Prevention’s YRBS provides an opportunity to examine the relationship between sexual behaviors and SES and urbanicity, key measures for adolescent social determinants of health.

Sources of Support: Centers for Disease Control and Prevention
DISPARITIES IN THE EXPERIENCE OF SEXUAL VIOLENCE AGAINST ADOLESCENTS AND YOUNG ADULTS IN THE US AND THE IMPACT OF COGNITIVE LIMITATIONS
Frinny Polanco Walters, MD1, Sarah Pitts, MD2, Honora Einhorn, MSW, LCSW, MA1, Lauren E. Wisk, PhD2
1Boston Children's Hospital; 2Harvard Medical School/Boston Children's Hospital

Purpose: Research has consistently shown that children with developmental disabilities, especially cognitive disabilities, are sexually abused at increased rates compared to non-disabled peers. This study examines the prevalence of sexual violence compared to other crimes among adolescents and young adults (youth) and investigates the extent to which disparities may be varied for those with cognitive limitations.

Methods: Data on 16,969 nonfatal crimes committed against adolescents and young adults 12 to 26 years of age was obtained from the 2008-2016 National Crime Victimization Survey (NCVS). Survey respondents provide information about themselves and the type of victimization experienced. Logistic regression was used to assess the association between sociodemographics (sex, age, race/ethnicity, education and income) and sexual violence (rape/sexual assault vs other crime), and to investigate if cognitive limitations moderated disparities in sexual violence rates.

Results: Between the years 2008-2016, 2.4% of violent crimes committed annually against youth were classified as sexual violence. Youth with cognitive limitations were 3.5 times more likely to experience sexually violent crimes compared to those without cognitive limitations (OR 3.47; 95% CI, 2.70-4.45). Among youth without limitations, females had more than 5.8 times the odds of experiencing sexual violence compared to males (OR, 5.80; 95%CI, 4.40-7.64) while the rates of sexual violence against females with cognitive limitations were 7.5 times higher than for males (OR, 7.50; 95%CI, 3.83-14.7) with similar limitations. Hispanic youth in both groups experienced significantly greater odds of sexual violence but this was doubled for youth with cognitive limitations (OR 2.6; 95%CI, 1.12-6.09) compared to youth without limitations (OR 1.33; 95% CI, 1.02-1.74). The odds of reported sexual violence was highest for youth age 18-20 years compared to other ages; this was consistent with and without cognitive limitations. There was no statistically significant difference in the rates of sexual violence by educational attainment among those without cognitive limitations, but the rate of sexual violence against those with cognitive limitations was significantly higher for those with higher education attainment.

Conclusions: We find evidence that the rate of sexual violence victimization is significantly greater against youth with cognitive limitations, and that the presence of cognitive limitations exacerbates disparities in sexual violence across several sociodemographic variables. We suspect these rates represent an underestimation of sexual violence victimization given the data set’s exclusion of persons living in institutions and the use of proxies for the most cognitive limited. Adolescent medicine specialists should be aware of these disparities and educate patients with cognitive limitations and their families to try to reduce vulnerability.

Sources of Support: Leadership Education in Adolescent Health Training Grant T71MC00009, MCH, HRSA
72.

VIOLENCE AND BULLYING AMONG ADOLESCENT MALES: PROFILES OF RISK AND PROTECTIVE FACTORS
Lindsay A. Taliaferro, PhD, MPH\(^1\), Jennifer L. Doty, PhD\(^2\), Amy L. Gower, PhD\(^3\)
\(^1\)University of Central Florida; \(^2\)University of Florida; \(^3\)University of Minnesota

Michael J. Rovito, PhD\(^1\)

**Purpose:** Violence and bullying among males have become major public health problems. Factors associated with violent and bullying behavior occur across levels of adolescents’ social ecologies. However, researchers have not examined how risk and protective factors may co-occur in unique patterns to increase the likelihood adolescent males might engage in school violence or physical bullying perpetration. In a population-based sample of adolescent males, we addressed two research questions: (1) How do common risk and protective factors co-occur among adolescent males? (2) How are different risk/protection profiles associated with school violence and physical bullying perpetration among adolescent males?

**Methods:** Data came from the population-based 2016 Minnesota Student Survey. The analytic sample included 63,818 male students in grades 8, 9, and 11; 69% were White. The dependent variables were violence perpetration in the last 12 months and bullying perpetration in the last 30 days (1=any, 0=none). Latent class analysis was used to derive the independent variable, groups of students with distinct profiles of 22 behavioral, intrapersonal, and family risk factors, and family and school/community protective factors (e.g., social connectedness and safety indicators). Controls included grade, race/ethnicity, free/reduced-priced lunch, and region. Bivariate and multiple logistic regression analyses examined how students in each risk/protection profile differed on violence and bullying perpetration.

**Results:** Participants clustered into five groups: high-risk, low safety, low teacher connectedness (7.2%); high-risk, moderate safety, low connectedness (10.5%); moderate-risk, high safety, moderate connectedness (18.0%); low-risk, moderate safety, high parent connectedness (31.0%); and low-risk, high safety, high connectedness (33.0%). All the classes significantly differed from each other on the violence and bullying perpetration outcomes, except the high-risk, moderate safety, low connectedness and high-risk, low safety, low teacher connectedness classes. These two classes demonstrated the highest probabilities for school violence (0.27 and 0.31, respectively) and bullying perpetration (0.39 for both). The moderate-risk, high safety, moderate connectedness group showed average levels on the outcomes (school violence: 0.18; bullying perpetration: 0.28), while the low-risk, moderate safety, high parent connectedness class showed slightly below average levels of school violence (0.11) and bullying perpetration (0.20). Finally, the low-risk, high safety, high connectedness class was least likely to engage in school violence (0.04) and bullying perpetration (0.11), compared to the other classes. Results of logistic regression analyses confirmed that, compared to the low-risk, high safety, high connectedness class, youth in the high-risk, moderate safety, low connectedness group had the highest odds of all classes for school violence (OR = 9.15, 95% CI: 8.36, 10.02) and bullying perpetration (OR = 5.57, 95% CI: 5.20, 5.97).

**Conclusions:** Students reporting the highest levels of behavioral, intrapersonal, family, and school risk factors; lowest levels of school and neighborhood safety; and lowest levels of connectedness to adults showed the greatest odds of engaging in school violence and bullying perpetration. Further, lower levels of social connectedness appear more strongly associated with violence and bullying outcomes than lower levels of school/neighborhood safety. Practitioners working with high-risk adolescent males should attempt to strengthen their connections with prosocial adults to help prevent involvement in violent and bullying behaviors.

**Sources of Support:** none