

2019 SAHM ANNUAL MEETING

Platform Research Presentations: Risk, Screening and Prevention in Adolescent Health

35.

LATENT CLASS MODELS FOR ADOLESCENTS' ROUTINE CARE USE: EVIDENCE FOR DIFFERENCES IN CARE USE BY SEX AND COHORT STARTING IN CHILDHOOD FROM A U.S. PANEL

Arik V. Marcell, MD, MPH, Kathryn Van Eck, PhD, Madhuli Thakkar, MPH, Pamela Matson, PhD, Lingxin Hao, PhD
Johns Hopkins

Purpose: Evidence demonstrates routine care use (RCU) has positive impacts on adolescents' current health and health later in life. Understanding RCU patterns over time is important in identifying when to target interventions for adolescents who are vulnerable to becoming disconnected from healthcare, particularly male adolescents. Prior studies on adolescents' RCU mainly use cross-sectional data describing only group-level differences by age and sex; use insurance-based data, precluding uninsured individuals; and do not account for care use established during childhood. This study's goal was to describe prospective patterns of RCU from childhood through adolescence stratified by sex.

Methods: Data come from the 1979 National Longitudinal Survey of Youth (NLSY79) Child/Young Adult biennial household-based survey of all biological children born to NLSY79 female respondents from 1980 to 1997. We used longitudinal latent class analysis (LCA) stratified by sex to identify patterns of RCU (measured as routine checkup with doctor in last year) reported prospectively over 7 time points among an analytic sample of 6,204 respondents ages 5 through 17. Class covariates included respondents' predisposing factors (9 birth cohorts, race/ethnicity, urbanicity) and enabling factors (mother's education at respondents' birth, respondents' health insurance at age 5).

Results: LCA modeling identified different RCU patterns, with 3 classes for males and 4 classes for females. For males, 43% of the sample started at 87% RCU at age 5 declining minimally to 76% over time [Highest-decline Class]; 23% started at 67% RCU, declining to 40% at age 7, but increasing to 87% by age 15 [Mid-low-high Class]; and 32% started at 58% RCU declining to 33% over time [Mid-low-decline Class]. For females, 35% of the sample started at 90% RCU at age 5 that was sustained over time [Highest-stable Class]; 41% started at 76% RCU, minimally declining to 53% at age 13, but increasing to 64% at age 17 [High-decline Class]; 12% started at 46% RCU, steeply declining to 25% at age 7, but sharply increasing to 88% RCU by age 17 [Mid-low-high Class]; and 13% started at 43% RCU, steeply declining to 14% at age 9, and slowly increasing to 45% by age 17 [Mid-low-mid Class]. Class membership varied by respondents' predisposing and enabling factors, particularly birth cohort (all p 's < 0.05). Highest-use class membership increased substantially for males and females from those born in 1980-81 through those born in 1996-97. Although the lowest-use class reduced substantially for males and females across birth cohorts, still one-sixth of males born in 1996-97 (17%) belonged to the lowest-use class compared to only 2% of females born in the same year.

Conclusions: Findings highlight differences in RCU patterns by sex and birth cohort pointing to the childhood/adolescence transition as a fulcrum point in changes in RCU for both sexes. For respondents born in 1994-97, lowest-use class membership by females was rare, but almost one-sixth of males were members. These different RCU patterns suggest that males and females require sex-specific strategies to enhance RCU engagement, with male-focused approaches needing to start earlier in childhood.

Sources of Support: Hopkins Discovery Grant/R24HD042854; K01DA035387

2019 SAHM ANNUAL MEETING

Platform Research Presentations: Risk, Screening and Prevention in Adolescent Health

36. HIV AMONG YOUNG BLACK MEN WHO HAVE SEX WITH MEN IN BALTIMORE CITY: WHERE ARE WE WITH PRE-EXPOSURE PROPHYLAXIS DELIVERY AND UPTAKE?

Christina Fennell, SM (c)¹, Errol Fields, MD, PhD, MPH², Christina Schumacher, PhD², Aruna Chandran, MD, MPH³, Ashley Price, MS, CHES⁴, Lavisha McClarin, MPH², Jeannie Murray, MS², Renata Arrington-Sanders, MD, MPH, ScM², Maisha Davis, LCSW-C⁵, Kathleen Page, MD², Adena Greenbaum, MD, MPH⁴, Patrick Chaulk, MD, MPH⁴, Jacky Jennings, PhD MPH²
¹Harvard T.H. Chan School of Public Health; ²Johns Hopkins University School of Medicine; ³Johns Hopkins University Bloomberg School of Public Health; ⁴Baltimore City Health Department; ⁵Chase Brexton Health Care; ⁴Baltimore City Health Department

Purpose: In 2016, approximately 57.6% of new HIV cases in Baltimore City were among men who have sex with men (MSM) and 16.6% of new HIV cases were among young black MSM ages 13-24 (YBMSM). In 2018, tenofovir disoproxil fumarate/emtricitabine for HIV pre-exposure prophylaxis (PrEP) was approved for use among youth under 18. When taken daily, PrEP can reduce an individual's risk for HIV infection by approximately 92%. A PrEP cascade is a pattern of categories which can help evaluate areas to improve PrEP access and uptake. We sought to understand the PrEP cascade among young MSM (YMSM) as a part of a demonstration project in Baltimore City and to compare PrEP cascades among MSM by age (youth 13-24 vs. adults >24 years) and race (non-Hispanic black vs. white).

Methods: YMSM data from Project IMPACT, a Centers for Disease Control and Prevention (CDC)-funded initiative focused on increasing PrEP delivery and uptake among priority populations, such as MSM, were collected from September 2015 through March 2018 from seven partner sites in Baltimore City. Youth were defined as individuals aged 13-24. PrEP cascade categories included: eligible based on risk, referred, accepted, linked, assessed for PrEP, clinically eligible, prescribed, and currently on PrEP. Descriptive statistics were generated and statistical analyses, using chi-square tests, were conducted to determine significant differences by age and race.

Results: The project included 1,445 MSM, and 28.1% (n=406) were YMSM. Among YMSM, the mean age was 21.4 years (SD=2.0) and 63.1% (n=256) self-identified as non-Hispanic black. Approximately 46.6% (189/406) of YMSM who were eligible based on risk, aligned with CDC recommendations for PrEP, were referred to a PrEP prescribing clinic. Among referred YMSM, 52.9% (100/189) accepted PrEP services, and 100% (100/100) of these individuals were linked to a medical provider. Among linked YMSM, 93% (93/100) were assessed for PrEP. Among assessed YMSM, 96.8% (90/93) were clinically eligible, and 88.9% (80/90) of clinically eligible YMSM received PrEP prescriptions. Less than half (42.5% (34/80)) of YMSM with PrEP prescriptions, were currently on PrEP anytime between January and March 2018. Cascades among MSM by age (youth vs. adult) did not show significant differences. When stratified by race, YBMSM were less likely to be referred for PrEP (black, 43.8% [112/256]; white, 54.5% [48/88]; p=0.298) and to be currently on PrEP (black, 31.8% [14/44]; white, 62.5% [15/24]; p=0.131), although this did not reach significance.

Conclusions: Less than half of eligible YMSM were referred to PrEP services and less than half of those prescribed PrEP were currently on PrEP between January and March 2018. The PrEP cascades did not significantly differ by age. When stratified by race, YBMSM had lower proportions of PrEP referrals and current PrEP use. These findings suggest that additional efforts are needed to improve PrEP referrals and uptake among YBMSM; otherwise, we risk widening rather than reducing HIV disparities affecting this population. Next steps should include identifying key barriers and facilitators of successful PrEP delivery and uptake among YBMSM in Baltimore City.

Sources of Support: CDC PS15-1506/1509

2019 SAHM ANNUAL MEETING

Platform Research Presentations: Risk, Screening and Prevention in Adolescent Health

37. 'SAFETY WITH MY LIFE OR MY FREEDOM IS REAL TO ME': SEXUAL SAFETY STRATEGIES AMONG YOUNG BLACK WOMEN EXPERIENCING REPRODUCTIVE COERCION

Kennethea Wilson, MPH¹, Amy Caplon, BS², Tiara Willie, PhD, MA², Kamila A. Alexander, PhD, MPH, RN³

¹The George Washington University; ²Yale University; ³Johns Hopkins University

Purpose: Reproductive coercion (RC), behaviors usually by a male partner to control reproductive outcomes of a female partner, can cause detrimental sexual health consequences. Closely aligned with intimate partner violence (IPV), RC is associated with elevated risks for HIV and sexually transmitted infections (STI) as well as unintended pregnancies. Low-income Black women report RC experiences at disproportionate rates compared to women of other races, ethnicities, or socioeconomic backgrounds. However, little is known about strategies they use to protect their sexual and reproductive health when faced with RC experiences. The goal of this study was to describe the most frequent types of RC and analyze sexual safety strategies employed by low-income adolescents and young adult (AYA) Black women who report experiencing RC.

Methods: A sample of self-identified Black, young women ages 18 to 25 was drawn from a larger, IRB-approved cross-sectional study designed to examine IPV, RC, and sexual health. Participants were recruited from three youth development centers and three Women, Infants, and Children's (WIC) programs. Eligible women (N=149) were enrolled and invited to complete tablet-based surveys at recruitment sites. Lifetime RC was measured using 10 items to assess pregnancy coercion and birth control sabotage. An affirmative response to one RC item was considered evidence of RC. Survey participants reporting RC experiences (n=57) were invited to complete semi-structured interviews (n=17) to explore sexual safety strategies. Descriptive analyses described participant characteristics and RC types. Qualitative data were managed in Dedoose 9.4[®] software. Research team members developed a codebook, analyzed transcripts using thematic analysis, compared data patterns across transcripts, and reconciled discrepancies.

Results: Participants' mean age was 21 years (SD= 2.2) and 23% had high school diplomas. Physical (70.2%) and sexual (49%) violence were prevalent. Fewer than one-quarter (19.3%) used condoms consistently in previous 3 months and 52.6% reported using hormonal contraceptives for pregnancy prevention. More than one-third (40.4%) reported two or more pregnancies and slightly more than half (51%) had a history of STIs. A majority (82.5%) of participants experienced pregnancy coercion (e.g. pressure and threats) whereas 61% reported birth control sabotage (e.g. forced sex without condom). Qualitatively, sexual safety strategies were described through three emerging themes: 1) creative negotiation - strategies for conveying non-consent to sexual activities; 2) strategic evasion - ways participants avoided pressures from male partners and family members to become pregnant; and 3) mandatory hyper awareness - persistent vigilance required to combat birth control sabotage during sexual encounters.

Conclusions: Low-income AYA Black women reported high rates of pregnancy pressure and birth control sabotage. Descriptive results highlighted disproportionate rates of IPV and STI histories. Descriptions of pregnancy pressure from family members was a relatively new finding in this population. Participants in this study described strategic ways to resist RC behaviors from male partners, emphasizing a sexual safety process to protect their health. Future research could draw on sexual safety strategies and acts of resistance to design pregnancy and STI prevention interventions serving low-income Black AYA women experiencing RC and IPV.

Sources of Support: National Institutes of Health/ NIMH 5R25MH087217 and NICHD T32-HDO64428

2019 SAHM ANNUAL MEETING

Platform Research Presentations: Risk, Screening and Prevention in Adolescent Health

38. UNDERSTANDING VARIATIONS IN PRIMARY CARE PROVIDERS' PERCEPTIONS AND PRACTICES IN IMPLEMENTING CONFIDENTIAL SEXUAL HEALTH SERVICES FOR ADOLESCENTS

Renee E. Sieving, PhD, RN, FAAN, FSAHM¹, Christopher J. Mehus, PhD¹, Marina Catalozzi, MD, MSCE², Stephanie A. Grilo, BA², Annie-Laurie McRee, MPH, DrPH¹, Riley Steiner, MPH, PhD³, Janna Gewirtz-O'Brien, MD¹, Emily Denight, MPH¹, Kristen Kaseeska, MPH⁴, Julie Gorzkowski, MSW⁴, Jonathan Klein, MD, MPH⁵, John Santelli, MD, MPH²

¹University of Minnesota; ²Columbia University; ³Center for Disease Control; ⁴American Academy of Pediatrics; ⁵University of Illinois at Chicago

Purpose: Confidentiality and private time between adolescents and their healthcare providers are key elements in the delivery of quality sexual and reproductive health services (SRHS) and other clinical preventive services. There are substantial gaps between professional guidelines and clinical practice around confidential services for adolescents. Efforts to improve quality SRHS require exploration of barriers and facilitators to their delivery from the perspectives of primary care providers, adolescents, and parents. In this analysis, we examine providers' perceptions and practices related to quality SRHS for adolescents.

Methods: Guided by a conceptual framework that recognizes roles of adolescents, parents, and providers in adolescent healthcare, we conducted structured qualitative interviews with a purposive sample of pediatricians, family physicians, and nurse practitioners (n=24) from urban and rural communities, selected from areas with higher and lower rates of adolescent pregnancy in a Midwestern state. We sampled providers in primary care as the vast majority of adolescent preventive visits in the U.S. take place in these settings. Provider interviews included discussion of: perceived importance of private time with adolescent patients; confidentiality in providing SRHS to adolescents; sexual health screening and counseling practices; provision of clinical preventive services (e.g., vaccines, condoms, hormonal contraception); and SRHS referral practices. Thematic analysis of interviews using our conceptual framework surfaced key themes regarding provision of quality SRHS for adolescents.

Results: Two key themes emerged regarding providers' perceptions and practices related to quality SRHS: 1) provider discretion/decision-making about introducing private time; and 2) variations in routine SRHS screening and counseling. Provider decision-making was influenced by many factors including the use of a patient's age to guide introduction of private time and confidentiality, provider views regarding the purpose of private time, and provider judgements of risk (based on their relationship with the adolescent and/or their interactions with the adolescent's parents). Most providers endorsed the importance of private time and confidentiality in adolescent visits but acknowledged that this did not always translate to including these elements in individual visits. Providers voiced a clear understanding of the need for and guidelines around routine SRHS screening. Variations in routine SRHS screening and counseling practices were influenced by factors including a provider's comfort with specific topics, availability of resources, policies and protocols of the practice setting, and the presence and role of adolescents' parents in the visit.

Conclusions: This study is among the first to explore providers' perceptions and practices related to quality SRHS for adolescents. Understanding practices for 11-17 year olds in communities with higher and lower access to SRHS and variable rates of adverse adolescent sexual health outcomes helps identify opportunities for providers and primary care settings to prepare adolescents and parents for the confidential visits required to deliver quality SRHS. Our findings indicate that providers would benefit from guidelines that include standardized language, protocols, and practices that can be readily integrated into their clinical practice settings and communicated to other clinical staff, adolescent patients, and their families.

Sources of Support: CDC#U48DP005022-04-05

2019 SAHM ANNUAL MEETING

Platform Research Presentations: Risk, Screening and Prevention in Adolescent Health

39.

TRAUMA-INFORMED PERSONALIZED SCRIPTS (TIPS) TO ASSESS FOR PARTNER VIOLENCE AND REPRODUCTIVE COERCION: A PILOT RANDOMIZED CONTROLLED TRIAL

Amber L. Hill, MSPH¹, Hadas Zachor, MD², Kelley A. Jones, PhD, MPH¹, Janine M. Talis, MPH¹, Sarah M. Zelazny, MPH³, Elizabeth Miller, MD, PhD¹

¹University of Pittsburgh; ²The University of Chicago; ³Allegheny Health Network Trauma Centers

Purpose: Reproductive coercion (RC) and intimate partner violence (IPV) among patients in the family planning (FP) setting is common. Effective and consistently implemented interventions are needed to address RC and IPV, utilizing evidence-based frameworks of universal education and brief counseling to improve knowledge and access to resources. TIPS is an implementation study that tests the utility of tailored patient messages and provider scripts to encourage conversations on IPV and RC between patients and their clinicians.

Methods: Female patients ages 16-29 years seeking services at participating FP clinics were eligible. Participants were randomly assigned to either 1) receive both patient messages and provider scripts for what to say during the clinical encounter or 2) only the provider receiving scripts. Participants completed a tablet-based survey in the waiting room prior to a clinic appointment, asking a series of questions regarding relationships and sexual and reproductive health. Their responses prompted at least one of four tailored provider scripts (fear, safety, harm reduction, and universal education). Participants in the intervention group also received patient messages with psycho-educational feedback. Intervention implementation data were collected immediately post-visit; a final survey at 4-6 months collected outcome data. Linear and logistic multivariate regression models were conducted to compare outcome data at follow-up.

Results: A total of 240 patients completed the baseline survey (intervention n=114, comparison group n=126). Retention at follow-up was 90%. Among all participants, recent IPV victimization (past three months) decreased from 12.5% at baseline to 6.9% at follow-up ($p=0.047$) and RC decreased from 7.1% to 1.9% ($p=0.008$). Use of any contraceptive methods improved from 69.6% to 87.9% ($p=0.000$), with statistically significant increases in LARCs and hidden contraceptives. No differences were observed between intervention and comparison groups for any outcomes. In a post-hoc logistic regression analysis, individuals who reported discussing IPV with their providers at the baseline visit had higher odds of using any contraceptive method (aOR=4.18, 95%CI=1.19-14.65) and LARCs (aOR=6.05, 95%CI=1.01-36.42) at follow-up.

Conclusions: At 4-6 months follow-up, the TIPS study shows promising results. While no effects from adding patient activation messages were observed, this pilot study highlights the positive impact patient-provider conversations about IPV and RC, facilitated by short, tailored provider scripts, can have on IPV and RC victimization. Equally significant, this intervention provided further evidence on the nuanced relationship among IPV, RC, and contraception. By having patient-centered, comprehensive discussions on IPV/RC, patients may feel empowered to choose the contraceptive method that works best for them in the context of their relationship.

Sources of Support: Research was supported by the National Center for Advancing Translational Sciences of the National Institutes of Health under Award Number TL1R001858, and by grants R01HD064407 and K24HD075862 from the National Institute of Child Health and Human Development

2019 SAHM ANNUAL MEETING

Platform Research Presentations: Risk, Screening and Prevention in Adolescent Health

40.

USING RESPONDENT DRIVEN SAMPLING TO ESTIMATE HOMICIDE AND MOTOR VEHICLE CRASH RISK AMONG ADOLESCENTS AND YOUNG ADULTS IN A LATINO COMMUNITY

Manuel Ángel Oscós-Sánchez, MD¹, Belinda Bustos Flores, BA, MA, PhD², Lorena Claeys, PhD², Yuanyuan Liang, PhD, MSc, BSc³, Belem López, PhD Cognitive Psychology⁴, Marisol D. McDaniel, DrPH, MPH⁴, Luz Dolores Oscós-Flores, BSEd¹, Deborah Parra-Medina, MPH, PhD, FAAHB⁴, Alice P. Villatoro, PhD⁴, Paula Winkler, BA MEd¹

¹The University of Texas Health Science Center at San Antonio; ²The University of Texas at San Antonio;

³University of Maryland School of Medicine; ⁴The University of Texas at Austin

Purpose: Young people at highest risk of injury are often excluded when school or household based sampling methods are used. Respondent Driven Sampling (RDS), a variant of chain referral sampling, has been used to recruit probability samples of populations who are hard to reach or recruit into studies. In this study, RDS was used to ensure the inclusion of youth who do not attend school regularly or lack residential stability. RDS analysis estimated the proportion of young people in a Latino community who are at risk for homicide and being in a motor vehicle crash (MVC).

Methods: Four initial participants (“seeds”) were selected based on desired inclusion characteristics. “Seeds” completed questionnaires and were given coupons to recruit up to three additional participants from their social networks. Seed-recruited participants then completed questionnaires and became recruiters for the next wave. The process continued for 30 days. Questionnaires were self-administered at a local public library in either Spanish or English on a computer tablet using REDCap. A Certificate of Confidentiality was obtained prior to data collection. Adolescents who lived within the defined geographic area; were between the ages of 14-21; and were “seeds” or recruited by prior study participants were eligible to participate in the study. The sampling frame was constructed based on questions that each participant answered about their network size and relationship to their recruiter. To obtain unbiased population estimates, all analyses were weighted to accommodate the RDS design. Weighted means and 95% confidence intervals were calculated using Stata/SE (version 15).

Results: With four “seeds” and a maximum of 10 waves, 129 participants were recruited. 88% were Latino, 57% male, 54% 14-18 years old, and 46% 18-21 years old. All variables reached equilibrium by four waves. RDS population estimates (95% CI) indicate that 34.1% (26.4-42.7%) of youth in the area do not regularly attend school and 9.8% (6.1-15.1%) are unstably housed. 48.4% (39.8-57.1%) recently used alcohol, 47.2% (38.5-56.1%) have significant depression symptoms, and 20.7% (13.9-29.8%) binge drink. Based on responses to a Violence Perpetration and Injury Scale, 29.4% (22.1-38.1%) are at risk for homicide. 16.7% (11.4-23.7%) got into a serious physical fight, 12.2% (7.7-18.7%) took part in a group fight, and 9.6% (5.9-15.3%) hurt someone badly enough that they needed bandages or care from a doctor. The most prevalent MVC injury risk behaviors were riding in a car where the driver was: talking on a cell phone 72.8% (64.5-79.7%), texting 62.3% (53.3-70.6%), upset or stressed 60.9% (51.9-69.1%); and not wearing a seatbelt 59.9% (51.2-67.9%).

Conclusions: An alarming number of young people in this community are at risk for homicide and a MVC. RDS was an effective recruitment strategy to include youth who do not regularly attend school or lack residential stability. Their life experiences need to be included as we try to understand and prevent homicide and MVCs in urban Latino communities.

Sources of Support: South Texas AHEC Research Initiative, the University of Texas at Austin Latino Research Initiative