7.

STIGMA AND THE SOCIAL ENVIRONMENT OF ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH IN GHANA: UNDERSTANDING "BAD GIRL"
Kelli Stidham Hall, PhD1, Abubakar Manu, PhD2, Emmanuel Morhe, MD3, Sneha Challa, MPH4, Dana Loll, MPH5, Jessica Dozier6, Melissa Zochowski, MBA4, Andrew Boakye, MPH6, Lisa Harris, MD, PhD7, Richard Adanu, MD3, Vanessa Dalton, MD, MPH4
1Emory University; 2University of Ghana; 3Komfo Anokye Teaching Hospital, Kwame Nkrumah University of Science and Technology; 4University of Michigan; 5Komfo Anokye Teaching Hospital

Purpose: As part of a broader effort to study the social environment of adolescent sexual and reproductive health (SRH) in Ghana, we qualitatively explored the determinants and consequences of sexual activity, contraceptive use, pregnancy, early childbearing, abortion, and family planning (FP) service use among young Ghanaian women, including the role of social stigma in shaping FP experiences and outcomes.

Methods: In our qualitative study, which was the first phase of a larger mixed methods project, we conducted in-depth, individual, semi-structured interviews with 63 adolescent and young adult women ages 15-24 in Accra and Kumasi, Ghana. Women were recruited from 5 secondary schools and 5 health facilities. Purposive sampling was used to ensure diversity in reproductive, relationship, and socioeconomic backgrounds. Interviews were conducted in local languages or English, recorded, and transcribed verbatim. Applying principles of grounded theory, we conducted a thematic analysis to identify key codes and themes using Dedoose software.

Results: Stigma and discrimination emerged as one of five major themes. Young women described personal feelings and lay attitudes that adolescent sexual activity and its consequences (particularly non-marital sex, contraceptive use, pregnancy, and childbearing, and abortion generally) are perceived to be acts of disobedience, “disgrace,” “disrespect,” “shame,” and contribute to community “gossip” and “bad girl” labeling. Enacted stigma was described as experiences of discrimination, marginalization, and psychological and physical mistreatment of sexually active, pregnant, and parenting adolescents by family members, peers, intimate partners, teachers, religious leaders, and health care workers. Secret-keeping and non-disclosure, which were strategies used to avoid or reduce stigma, impacted sexually-active adolescents’ willingness to seek FP services and use modern contraception. Other salient themes (described in expanded results) included: 1) multiple levels of influence on adolescent SRH; 2) health and social consequences of adolescent SRH; 3) abortion attitudes and access; and 4) lack of knowledge and negative perceptions and experiences with FP methods and services.

Conclusions: Ghanaian adolescents’ experiences with sexual activity, contraception, pregnancy, early childbearing, abortion, and FP service use are shaped by diverse, multi-level, and often negative influences within their social environments and have significant implications for their broader health and wellbeing. Notably, stigma appears to preclude effective FP and contribute to unintended pregnancy and its sequelae. Findings from this qualitative work informed development of a new stigma scale, which we used in our community-based survey study of 1,069 Ghanaian young women to quantitatively measure the social context of adolescent SRH and its impact on FP, health, and social outcomes.
Sources of Support: This work was supported by the Society of Family Planning Research Fund (PI Hall, #SFPRF8-1), a National Institute of Child Health and Human Development career development award for KSH (#K12HD001438, PI Johnson), and by the University of Michigan African Social Research Initiative and Office of the Vice President of Research.

8.

OVER-THE-COUNTER EMERGENCY CONTRACEPTION FOR ALL AGES: HOW HAS RECENT POLICY CHANGE INFLUENCED ADOLESCENT PROVIDERS’ PRACTICE?
Amber I. Truehart, MD, Lee A. Hasselbacher, JD, Camille Fabiyi, PhD, Melissa Gilliam, MD, MPH
The University of Chicago

Purpose: To assess awareness and impact of current over-the-counter emergency contraception (EC) policies among adolescent providers in pediatrics, family, and emergency medicine.

Methods: From June – October 2014, semi-structured individual interviews were conducted with faculty and medical residents from each subspecialty in four urban, academic institutions in Chicago. Interviews were digitally recorded, transcribed, and analyzed; salient themes are presented.

Results: Few participants were aware of recent policy change regarding EC. They described limited formal education in residency about policy in general with most of their information coming from colleagues with a special interest in the topic. There was an overall positive reaction to the policy change by all specialties, once aware of it, but both family medicine and pediatric residents cited some concerns, including comments about cost and that OTC status might discourage patients from coming in and receiving comprehensive sexual and reproductive health counseling. All three specialties believed this policy change would affect their future clinical practice and contraceptive counseling in that they would counsel about EC on a more frequent basis.

Conclusions: Clinicians caring for adolescents may lack awareness of EC policy, providing an avenue for addressing adolescent EC underuse. These findings could inform resident education around EC providing a foundation for integrating important policy information into residency education.

Sources of Support: This research was supported by a grant from the Society of Family Planning Research Fund.

9.

"A COMMUNITY BASED PARTICIPATORY RESEARCH (CBPR) JOURNEY BRINGING CULTURE AND FAMILY TO THE CENTER OF AN INTERVENTION TO PROMOTE POSITIVE YOUTH DEVELOPMENT AND REPRODUCTIVE HEALTH: THE ENCuentro PROJECT"
Maria Veronica Svetaz, MD, MPH, FSAHM, Renne Sieving, PhD, FSAHM, Michele Allen, MD, Rosemary Rodriguez Hager, BA, Kara J. Beckman, MA, Adriana Galvan, BA, Marina Castillo, MA
1HCMC, U of MN; 2University of Minnesota; 3Minnesota Department of Health; 4Guadalupe Alternative Programs; 5Guadalupe Alternative Project
Purpose: To describe the process and results of a pilot study of Encuentro, a health promotion intervention for Latino youth and families developed and implemented using a community based participatory research (CBPR) approach.

Methods: CBPR partners included researchers, Latino youth-serving professionals, parents, and youth from the Twin Cities area. Partnership processes were created and refined throughout the 5-year project to generate equity in decision making, preserve the voice of all participants, and prioritize program sustainability in the community. To develop the intervention, CBPR partners conducted focus groups with 148 local Latino youth and parents, and interviews with 30 local health and social service professionals working with Latino families. Priorities from this formative research guided intervention development. The resulting intervention, Encuentro, is a 16-week program for teens ages 11-14 years and parents/caregivers consisting of four topics: cultural identity and pride; positive family connections and teen-parent communication; sexuality education; and youth life skills. Teens participated in two 2-hour sessions weekly for a total of 32 sessions; parents participated in weekly 2-hour sessions for a total of 16 sessions. Eight sessions included joint teen-parent activities. The program, delivered by experienced, trained Latino facilitators, was piloted in 2013-2014 with 56 Latino families at 3 community sites in Minneapolis/St. Paul. Families were randomly assigned to participate in a first round of the program, i.e., the program group; or to a delayed-program control group. Baseline and post-intervention surveys were completed with all teen and parent participants to assess program impact on behavioral and psychosocial outcomes.

Results: Pilot study findings confirm program feasibility and acceptability. About 82% of teens and 67% of parents attended 5 or more program sessions. On average, teens rated their program satisfaction as 3.3 of 4 possible points. Parents noted high levels of cohesion among participants; 97% would recommend this program to others. Compared to teens in the control group, teens in the program group reported substantially more involvement in activities celebrating Latino culture (p=0.12); greater communication with parents about sexual health topics (p=0.06); and increased awareness of healthy relationships (p=0.17). Parents in the program group reported higher levels of cultural pride (p<0.01), engaging in more activities to share Latino values and traditions with their teens (p=0.10), and greater communication with their teens about sexual health topics (p=0.01) than did control group parents. Qualitative data indicated that Encuentro provided parents and teens opportunities to build strong social connections that increased their confidence in making healthy decisions and access needed resources. To ensure program sustainability, CBPR partners are currently working to transfer leadership of this program from the university to community organizations. Two community organizations continue to offer the program.

Conclusions: CBPR aligns interventions with consumer’s values and needs. Encuentro builds skills and pro-social supports that align with familism, a core Latino value, and brings cultural identity and connectedness to the core of the intervention. Previous research confirms that intervention pilot study outcomes foster positive development and reduce risky sexual behaviors among Latino youth.

Sources of Support: Centers for Disease Control and Prevention Cooperative Agreement #5U48DP001939-04.
LONG-ACTING REVERSIBLE CONTRACEPTION (LARC) AND CONDOM USE AMONG FEMALE U.S. HIGH SCHOOL STUDENTS: IMPLICATIONS FOR STI PREVENTION IN THE CONTEXT OF ADOLESCENT LARC SCALE-UP

Riley J. Steiner, MPH, Nicole Liddon, PhD, Andrea L. Swartzendruber, PhD, Catherine N. Rasberry, PhD, Jessica M. Sales, PhD

1Division of Adolescent and School Health, Centers for Disease Control and Prevention;
2Rollins School of Public Health, Emory University

Purpose: Long-acting reversible contraceptive (LARC) use among adolescents has been relatively low yet is increasing due to concerted scale-up efforts. LARC offers an unprecedented opportunity to reduce unintended pregnancies but there is concern that LARC users may be less likely to use condoms for preventing sexually transmitted infections (STIs). This study compared condom use by contraceptive type among a nationally representative sample of sexually-active female high school students (n=2,288).

Methods: Using data from the 2013 national Youth Risk Behavior Survey, participants reporting at least one sex partner in the last three months were considered currently sexually active. Contraceptive method at last sex was assessed by a single item, and participants could select one response including birth control pills; condoms; an IUD or implant; a shot, patch or ring; withdrawal or other method; or not sure. A separate item asked specifically whether the respondent used a condom at last sex. To compare LARC users to users of other highly effective contraceptive methods, we created an indicator variable to distinguish those reporting use of 1-LARC (IUD or implant), 2-oral contraceptives, and 3-the shot, patch or ring. Logistic regression analyses examined differences in condom use and other sexual risk behaviors, adjusting for race/ethnicity and grade.

Results: Overall, 1.8% of respondents reported using LARC, 5.7% used the shot, patch or ring, and 22.4% used oral contraceptives. In adjusted analyses, LARC users had nearly 70% lower odds of using condoms compared to oral contraceptive users (AOR: 0.31; 95%CI: 0.14-0.73). No significant differences in condom use were seen when comparing LARC users to shot, patch or ring users. Additional analyses revealed that LARC users had approximately four times the odds of having two or more recent sexual partners compared to oral contraceptive (AOR: 4.01; 95%CI: 1.88-8.55) and shot, patch or ring (AOR: 3.94, 95%CI: 1.23-12.59) users.

Conclusions: Among this nationally representative sample of sexually-active female high school students, LARC users were less likely to use condoms compared to oral contraceptive users. Similar findings among reproductive-aged samples have been attributed to women’s motivations to use condoms as a back-up pregnancy prevention method. Users of more highly effective LARC methods may no longer perceive a need for condoms. Our findings suggest that this pattern may also occur among adolescents, which is particularly concerning given that STI risk is often high during this developmental period. We found that adolescent LARC users were more likely to have multiple partners compared to users of other highly effective contraceptive methods. As efforts to promote the uptake of LARC among adolescents increase, there is a clear need to incorporate messages about condom use specifically for STI prevention. In addition to provider training, clinic-level strategies may be needed to retain adolescent LARC users in routine preventive care where they can receive prevention counseling,
condoms, and recommended STI screening.

Sources of Support: AS was supported by National Institute on Alcohol Abuse and Alcoholism grant number F32 AA022058. JS is partially supported by grant U01DP003894 from the US Centers for Disease Control and Prevention.

11.

MODIFIABLE NEIGHBORHOOD FEATURES RELATED TO ADOLESCENT HOMICIDE

Alison J. Culyba, MD, MPH1, Sara Jacoby, PhD, RN2, Therese S. Richmond, PhD, RN3, Joel A. Fein, MD, MPH1, Bernadette C. Hohl, PhD4, Charles C. Branas, PhD2

1The Children's Hospital of Philadelphia; 2The University of Pennsylvania; 3School of Nursing, The University of Pennsylvania; 4Rutgers University

Purpose: Homicide is a leading cause of adolescent mortality. Public health approaches highlight the importance of changing environmental contexts to promote health. However, violence research focuses predominantly on individual and lifestyle risks and little is known about how environmental factors impact adolescent homicide. We sought to identify associations between modifiable environmental features and adolescent homicide in order to identify targets for future interventions.

Methods: We conducted a population-based case-control study among Philadelphia, PA adolescent residents, ages 13-20, to determine the association between modifiable environmental factors and adolescent homicide. From 2010-2012, we identified fatally injured adolescents and used incidence-density sampling to recruit controls matched on gender and indoor/outdoor status via random digit dialing. We obtained detailed information about case participants from the Philadelphia Child Death Review Case Reporting System and the Philadelphia Police Department. Controls underwent structured telephone interviews. Blinded field researchers used standardized techniques to photograph case and control locations. Photos were stitched together to create 360-degree panorama photographs, and coded for 60 visible environmental elements. We used conditional logistic regression to model crude and adjusted associations between modifiable environmental risk and protective factors and adolescent homicide.

Results: We enrolled 143 outdoor homicide case participants and 155 matched control participants (total n=298). Case participants were significantly older (18 vs. 17 years), more often Black (87% vs. 56%), and more likely to have a history of prior arrest (67% vs. 15%) and, as such, we statistically adjusted for these and other factors. In adjusted analyses, multiple features of Philadelphia streets, buildings and natural surroundings were associated with adolescent homicide. The odds of homicide was 9.04 times higher in locations with moderate amounts of trash compared to locations with no trash (95% CI=1.10, 74.41). The presence of street lighting (OR 0.24; 95% CI=0.09, 0.66), painted marked crosswalks (OR 0.18; 95% CI=0.05, 0.60), and public transportation availability (OR 0.15; 95% CI=0.05, 0.51) were all significantly associated with decreased odds of homicide. Stop signs were associated with significantly increased homicide risk (OR 3.81; 95% CI=1.37, 10.54). The risk of homicide was significantly lower in primarily commercial locations compared to primarily residential locations (OR 0.39; 95% CI=0.20, 0.76), although this association did not reach statistical significance in adjusted models. The
odds of homicide was significantly higher in locations with attached row homes (OR 4.18; 95% CI 1.08, 16.23) and bars on houses (OR 9.45; 95% CI 2.59, 34.45). The presence of a park was associated with significantly lower risk of homicide (OR 0.09; 95% CI=0.01, 0.84). Private bushes or plantings were associated with a 2.79 times higher odds of homicide (95% CI=1.04, 7.47).

**Conclusions:** Employing a novel population-based case-control design, this is the first study to objectively quantify associations between features of the immediate surrounding environment and adolescent homicide. We identified multiple modifiable factors that can be targeted in future randomized intervention trials to reduce youth violence by improving neighborhood context.

**Sources of Support:** NIH National Institute of Child Health and Human Development (T32HD043021-11A1; recipient:Culyba) and National Institute on Alcohol Abuse and Alcoholism (1R01AA016187; PI:Branas)

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**TEEN PERSPECTIVES ON PROTECTING YOUTH FROM VIOLENCE AND TEEN PREGNANCY IN AN AGRICULTURAL LATINO COMMUNITY**

Marissa Raymond-Flesch, MD, MPH¹, Colette Auerswald, MD, FSAHM², Linda McGlone, MPH³, Alexandra Minnis, PhD⁴

¹University of California San Francisco; ²University of California Berkeley; ³Monterey County Health Department; ⁴Research Triangle Institute International

**Purpose:** While rates of teen pregnancy have decreased nationwide, they remain disproportionately high among Latino youth. Studies in urban populations of older adolescents have documented a relationship between gang affiliation and elevated risk of teen pregnancy, yet little research has focused on the overlap of these factors in non-urban populations. In California, gang-related youth violence and teen pregnancy rates are high in predominantly agricultural areas. Research to identify protective social and structural aspects of young adolescents’ environments is needed to inform development of culturally relevant interventions that support youth in achieving successful transitions through their teenage years.

**Methods:** Forty-six middle school and high school students residing in an agricultural community in California’s Central Coast were recruited from school and extracurricular activities to participate in one of eight focus groups. Focus groups examined violence exposure, relationship development, and the effects of gender and ethnicity on these experiences. Three research team members completed iterative rounds of modified grounded theory coding.

**Results:** Participants identified factors in their families and communities that protected youth from gang involvement and supported youth in delaying pregnancy and maintaining healthy relationships, allowing them to pursue their life goals. At the family level, participants identified parents as their “first teachers.” They reported learning from family members’ “mistakes,” including their prior gang involvement and unplanned pregnancies. Participants further reported that same-gender family members who are close in age (e.g., cousins and siblings) constitute their primary source of information...
about relationships and reproductive health. On the structural level, participants identified close relationships with adults in their neighborhoods and schools, as well as their involvement in religious institutions, cultural/ethnicity-affirming extracurricular activities, and youth-friendly after school activities as ways to promote support for youth while decreasing excess free time. Participants reported that their community invests in promoting their health and wellbeing through these resources, creating a sense of belonging for youth within their community.

**Conclusions:** Early and middle adolescents in this agricultural area reported that their choices regarding relationships, pregnancy, and gang involvement were influenced by their extended family networks as well as structural assets within their community, including resources that facilitate connections with adults or that promote community engagement through culturally affirming or gender empowering programming. It will be important to focus additional research on these family and structural factors to develop culturally relevant programs to improve rates of violence and reproductive health outcomes in rural communities.

**Sources of Support:** The Eunice Kennedy Shriver National Institute of Child Health and Human Development (R01 HD075787-01) and the Leadership Education in Adolescent Health Program (T71MC00003)