THE GATHERING OF NATIVE AMERICANS INTERVENTION: CULTIVATING HOPE AND MEANINGFUL RELATIONSHIPS FOR URBAN AMERICAN INDIAN ADOLESCENTS IN CALIFORNIA
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Purpose: Native American adolescents in the United States suffer from significant health disparities in depression, substance use and suicide. Research regarding culturally competent, community based, youth positive interventions that promote youth connection is needed to inform a response. The Gathering of Native Americans (GONA) is a strengths-based intervention intended to promote adolescent wellbeing and resiliency. Published research regarding its effects is extremely limited. Our evaluation of the GONA intervention in two California sites in 2012-2014 employs mixed-methods in order to answer the primary research question: Among adolescent Native Americans, what is the relationship between participation in GONA and resilience?

Methods: Surveys were collected from 241 11-17 y.o. participants (> 95% response rate) in the 2012-14 Oakland and Fresno GONAs. The surveys for this CBPR project were developed through collaboration with three Native American advisory councils who selected strengths-based (vs. risk-based) outcomes. Surveys were administered to participants pre- and post the 4-day gathering. Hope (modified Herth Hope Index or mHHI; range: 4-48), self-perceived connection to community, and self-perceived connection to family (each 4-point Likert scales) were employed to measure resilience. In addition, open-ended answers to two items were collected from youth post-intervention (“In what ways has GONA changed your point of view?” and “What has changed in your life or behaviors because of GONA?”) We investigated the change in hope, family connection, and community connection within each of three cohorts using paired t-tests. Qualitative data for the open-ended questions were coded by three coders and analyzed thematically.

Results: The mHHI increased significantly for all three cohorts (by 1.1, 1.4, and 2.5 in 2012, 2013, and 2015, respectively; p<.05 for all). Likewise, family connection increased in all three cohorts (by 0.2 in all years; p<0.05 in 2012 and 2013, p=0.059 in 2014). Community connection increased very modestly each year (by 0.08, 0.039, and 0.015 in 2012, 2013 and 2014, respectively; p<0.05 in 2012 and 2013 and p=0.057 for 2014). Predominant themes arising from the qualitative data analysis included: increased sense of interdependence; increased interest in connecting with community (“I’ve become better aware of myself and how I fit into the community”); finding individual purpose (“It’s a beautiful way to help us realize our priorities and ideals”); and increase in happiness “It has helped me open up and make new friends, and it’s made me feel happier and more at peace.”

Conclusions: Our findings suggest that the GONA intervention in Oakland and Fresno may be correlated with an increase in adolescent resilience as demonstrated by the intervention’s effects on hope, family connection, and connection to community (sub-domains of resilience). Larger studies with long-term follow-up are needed to assess whether GONA may serve as an effective intervention for addressing disparities in health and wellness through the promotion of connection and resilience in this highly vulnerable population of youth.
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**IDENTIFYING SUPPORT SYSTEMS OF YOUNG WOMEN IN FOSTER CARE TO REDUCE RISKY BEHAVIOR: A MIXED METHODS SOCIAL NETWORK STUDY**

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**Purpose:** Adolescents in the foster care system are more likely than their peers to use alcohol and other drugs and engage in high risk sexual behavior, such as unprotected intercourse. However, studies among foster youth suggest that positive peer influences, trusting relationships with adults, positive expectations about their future, and increased self-efficacy are protective factors that reduce their risk for poor health. The purpose of this study was to understand the context and qualities of foster youths’ social networks to inform interventions aimed at bolstering social support to mitigate risk among this vulnerable population.

**Methods:** We conducted mixed methods social network interviews (n=22) with adolescent and young adult women ages 16-24 recruited from youth-serving agencies in the Allegheny County, Pennsylvania foster care system. Participants completed a computer-based survey via EgoNet software, identifying 25 alters (e.g. people) in their social networks and the connections between each alter. They further indicated whether they used drugs or alcohol with each alter, how each person made them feel, and the direction of support provided by or for each alter. Using a spring-embedded algorithm, network maps were generated, yielding information including network density (mean=0.32), the degree of centralization (mean=64%) and number of inter-alter connections (mean=95). We then conducted face-to-face, semi-structured qualitative interviews with the network maps as a guide to understand the context and qualities of their social networks.

**Results:** In face-to-face interviews, women described significant trauma histories, including childhood sexual abuse and adolescent relationship violence. Relocation was common, with women describing multiple foster placements and moving to escape their current situation. Generally, women could identify sources of support in their lives. All participants included social service professionals on their network maps, referencing the emotional, instrumental (e.g. tangible aid) and informational (e.g. advice) support provided by these individuals, including facilitating connections to sexual health services. Despite exposure to adverse childhood experiences, many women described having relationships with biological families emerge in young adulthood, with support from grandparents a common theme. Women described feeling as if their networks became more stable as they aged, which was perceived as a positive experience. Finally, young women described having to prioritize friendships with others who shared common values and behaviors (e.g. abstinence from substance use) as they began to achieve key milestones in their young adulthood. Findings from the computer-based survey indicated that participants with more inter-alter connections and participants with no substance use indicated feeling more positive support from their social networks.
**Conclusions:** Despite exposure to adversity and network disruption, young women in foster care perceive sources of social support, which may be leveraged to positively influence health behavior.

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**ASSOCIATIONS BETWEEN ADVERSE CHILDHOOD EXPERIENCES, STUDENT-TEACHER RELATIONSHIPS, AND NON-MEDICAL USE OF PRESCRIPTION MEDICATIONS AMONG ADOLESCENTS**

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**Purpose:** Adolescent nonmedical use of prescription medication (NMUPM) is a serious public health issue that has been linked to delinquency, school dropout, and future addiction. There is substantial evidence of an association between adverse childhood experiences (ACE) and illicit substance use. However, few studies have investigated associations between ACE and NMUPM in population-based samples of adolescents, and even fewer have examined whether promotive factors might buffer these effects. The present study assessed the direct effects of ACE and positive student-teacher relationships on misuse of four commonly abused prescription medications, polyprescription drug use, and whether positive student-teacher relationship moderated the association between ACE and NMUPM.

**Methods:** Data were from the 2013 Minnesota Student Survey, an in-school paper and pencil survey administered every three years to students throughout Minnesota. The analytic sample (n=104,332) was comprised of 8th, 9th and 11th graders. Separate logistic and binomial regression models assessed the associations between ACE, teacher-student relationships, and misuse of each prescription medication, polyprescription drug use, and whether student-teacher relationships moderated these associations.

**Results:** The most frequently used prescription drug was Ritalin/ADHD medications (1.71%) followed by opiate-based painkillers (1.67%), tranquilizers (0.92 %), and stimulants (0.75%). Students who reported any use tended to use more than one medication. Every additional ACE was associated with a 1.56 (95% CI: 1.49, 1.64), 1.51 (95% CI: 1.46, 1.56), 1.47 (95% CI: 1.42, 1.52), and 1.52 (95% CI: 1.45, 1.58) increase in the estimated odds of past year stimulant use, ADHD medication, pain reliever, and tranquilizer use, respectively. The estimated rate of the number of prescription drugs used increased by 62% (95% CI: 1.56, 1.68) for every additional ACE. Positive student-teacher relationships buffered the association between ACE and NMUPD, especially at higher levels of ACEs (p’s < .001).

**Conclusions:** Our finding that strong, positive student-teacher relationships can offset the negative effects of harmful family environments for NMUPM, especially among youth experiencing multiple ACE, has important implications for prevention work. Training educators and developing teachers to recognize trauma symptomology are key points of intervention that can benefit schools and communities. In addition, acknowledging the significant role that teachers can have in student development and cultivating strong student-teacher relationships, in conjunction with traditional prevention programming, should be important considerations for school-based substance use prevention initiatives.
**Sources of Support:** This study was partially supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under National Research Service Award in Primary Medical Care grant number T32HP22239, Bureau of Health Workforce.

**ASSOCIATIONS BETWEEN PARENT-adolescent COMMUNICATION ABOUT SEX AND PROVIDER COUNSELING ABOUT HIV AMONG ADOLESCENTS: FINDINGS FROM THE 2011-2013 NATIONAL SURVEY OF FAMILY GROWTH**

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**Purpose:** Parent-adolescent communication about sex is a protective factor for many adolescent sexual risk behaviors, and recent analyses suggest that adolescents whose parents talk to them about sex are more likely to receive clinical preventive services. Likewise, provider counseling is associated with receipt of services and reductions in sexual risk. However, research on the relationship between parents and providers has largely focused on confidentiality protections, without attention to potential positive aspects of parent-adolescent-provider interactions. Hypothesizing that each type of communication may facilitate the other, this study examined associations between parent-adolescent communication and provider counseling about HIV.

**Methods:** Data were from the 2011-2013 National Survey of Family Growth, a cross-sectional, population-based survey. Adolescents aged 15-19 years (n=2,125) indicated whether they had ever communicated with a parent about how to say no to sex, methods of birth control, where to get birth control, how to prevent HIV, sexually transmitted diseases (STDs), and/or how to use condom. They also reported whether a medical provider ever talked to them about HIV, including how to prevent HIV, other STDs, condom use, reducing number of partners, abstinence, and testing. Associations between any parent-adolescent communication and provider counseling about HIV (any counseling and specific topics) were examined using chi-squared statistics and adjusted prevalence ratios, stratified by biological sex. Multivariable logistic models included age, race/ethnicity, mother’s education level, insurance status, and ever had sex. Interactions between any provider counseling and parent-adolescent communication were also considered, with HIV testing as the outcome.

**Results:** The majority of females (78.1%) and males (69.6%) had discussed at least one sex-related topic with a parent, whereas only 40.3% of females and 30.1% of males ever discussed HIV with a provider. Receipt of any provider counseling was higher among those who had communicated with a parent for both females (45.9% vs. 20.5%, p<.0001) and males (34.3% vs. 20.5%, p=.0003). Among females, any parent-adolescent communication about sex was positively associated with each HIV counseling topic examined in multivariable analyses. Among males, parent-adolescent communication was associated with provider counseling about HIV transmission, condoms, and abstinence. Although adolescents who received any provider counseling were more likely to have ever been tested for HIV (female APR=1.65, 95%CI=1.19-2.28; male APR=2.54, 95%CI=1.77-3.65), interactions between provider counseling and parent-adolescent communication were not significant.
Conclusions: These findings suggest that parent-adolescent communication about sex and provider counseling about HIV are positively correlated. Although causality cannot be inferred, there are several mechanisms by which these types of communication may be connected. Parental communication may increase adolescents’ self-efficacy to communicate with providers or providers may encourage adolescents to talk with their parents. Parents who discuss sex-related topics may increase opportunities for counseling by helping adolescents seek clinical care and ensuring that they have time alone with their provider. Empirically testing these pathways will inform strategies for leveraging parents’ and providers’ influence in synergistic ways. Given that parent-adolescent communication did not enhance the positive effects of provider counseling on HIV testing, intervention research should explore the potential for parents to reinforce messages from providers and vice versa.

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PARENT-ADOLESCENT ALCOHOL-SPECIFIC COMMUNICATION AND PERCEPTIONS OF ALCOHOL IN A HIGH SCHOOL SAMPLE

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Purpose: Understanding how parent-adolescent alcohol-specific communication shapes adolescents’ perceptions of alcohol is essential to providing evidence-based guidance to parents, but is understudied. We sought to describe the relationship between frequency of parent-adolescent alcohol-specific communication and adolescents’ perceptions of alcohol.

Methods: We conducted a secondary analysis of the National Center on Addiction and Substance Abuse Culture of High School Survey, a 2010 online survey of a nationally representative sample of 1000 high school students, aged 13-18. Adolescent perceptions of alcohol included: binge drinking is very dangerous, drinking is cool, and getting drunk is very dangerous. The main exposure variable was frequency of parent-adolescent alcohol-specific communication (often, sometimes, rarely, never). We conducted separate logistic regression models assessing the relationship between alcohol-specific communication and adolescent perceptions, adjusting for grade, gender, race, alcohol use (ever, never), and peer alcohol use (yes, no). We also assessed parental monitoring: parent knows where adolescent is most/all of the time (very true, somewhat true, not at all/a little true).

Results: Over half (57%) of subjects identified as white, 15.1% black, and 19.7% Hispanic; 49.6% were female, and grades 9-12 were represented in similar proportions. A third (35.9%) reported ever drinking; 56.2% reported peer alcohol use. Only 23.8% reported their parents speaking to them about alcohol often, 40.5% sometimes, 23.9% rarely and 11.8% never. As prior alcohol use modified the effect of alcohol-specific communication in the models predicting binge drinking is very dangerous and drinking is cool, results were stratified by prior alcohol use for those models. Among adolescents who used alcohol, a dose-response relationship existed between frequency of alcohol-specific communication and thinking binge drinking is very dangerous (often vs. never (AOR 6.98; 95% CI 2.75-17.73), sometimes vs. never
(AOR 4.96 95% CI 2.00-12.28), rarely vs. never (AOR 3.80 95% CI 1.46-9.88)]. Among never-drinkers, there was no relationship between frequency of communication and thinking binge drinking is very dangerous. While among those with prior use, more frequent communication was associated with decreased perceptions that drinking is cool [often vs. never (AOR .22; 0.08-0.61), rarely vs. never (AOR 0.21; 95% CI 0.07-0.60)], the inverse was true for never-drinkers. Alcohol-specific communication was associated with increased odds of perceiving getting drunk as very dangerous only at the greatest frequency of communication [often vs. never (AOR 2.36; 95% CI 1.41-3.95)]. Parental monitoring was also associated with adolescent perceptions of alcohol, and prior alcohol use did not modify this effect. More monitoring (very true vs. not at all/a little true) was associated with increased odds of thinking binge drinking is very dangerous (AOR 2.49; 95% CI 1.42-4.36) and decreased perception that drinking is cool [very true vs. not at all/a little true (AOR 0.20; 95% CI 0.11-0.36), somewhat true vs. not at all/a little true (AOR 0.49; 95% CI 0.26-0.92)]. Monitoring had no impact on thinking getting drunk is dangerous.

Conclusions: In this novel study, increased frequency of alcohol-specific communication and parental monitoring were associated with healthier adolescent perceptions of drinking alcohol. These relationships were particularly strong among adolescents reporting prior alcohol use.

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EXPLAINING PATTERNS OF BULLYING AND SEXUAL HARASSMENT INVOLVEMENT: CONNECTIONS MATTER
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Purpose: Bullying is associated with mental health problems in adolescence such as anxiety, depression, and suicide. Although emerging evidence suggests bullying and sexual harassment are linked, involvement in these behaviors is frequently examined separately. The purpose of this study was to answer two research questions: 1) In what ways do bullying and sexual harassment victimization and perpetration co-occur among public school students? 2) Does connectedness with family and community members protect against various patterns of bullying and sexual harassment, after controlling for internalizing symptoms?

Methods: Data were from the 2013 Minnesota Student Survey of 8th, 9th, and 11th graders (n=121,131); 50% were female; 73% were White. The dependent variable, patterns of bullying and sexual harassment, was derived from a latent class analysis of involvement in the following behaviors in the last 30 days (coded as 1=any, 0=none): victimization and perpetration via physical bullying, relational bullying, sexual harassment, and cyberbullying. Independent variables measuring connectedness included single items asking about communication with father and mother, how much parents and adult relatives care about you, and how much friends, teachers, and other adults in the community care about you. Responses ranged from 1=not at all to 5=very much. Internalizing symptoms were measured by a 5-item screener for internal mental distress (alpha=.80); self-harm and suicide ideation were both single items asking about past year behaviors. Controls included age, gender, free/reduced lunch status, family
structure, and race/ethnicity. Multinomial logistic regressions examined factors that protect against bullying and sexual harassment patterns.

**Results:** Youth were classified into five patterns of bullying and sexual harassment: High-Involvement of All Forms of Perpetration/Victimization (7%), Relational Victimization (17%), Sexual Harassment Victimization and Perpetration (8%), Physical Bullying and Sexual Harassment Perpetration (6%), and Low-Involvement in all Forms of Perpetration/Victimization (62%). Compared to the reference group, the Low-Involvement pattern, students in all other patterns were less likely to report that they could talk to their father (range: OR=.88-.92) and that their teachers cared about them (range: OR=0.74-.85). Youth categorized into the Sexual Harassment Victimization and Perpetration pattern and the Physical Bullying and Sexual Harassment pattern were less likely to report being able to talk with their mother (both: OR=0.87). Results were significant at the p<.001 level.

**Conclusions:** Result from this typology illustrate the importance of examining bullying and sexual harassment together, an important finding given the separate treatment of these issues in research and prevention. Although sexual harassment emerged as a unique behavioral pattern, a subgroup of students at risk for both physical bullying and sexual harassment were identified, and a high-risk subgroup included sexual harassment involvement with all other forms of bullying. Bullying prevention efforts should also address sexual harassment. Building stronger connections with parents and teachers may be important intervention strategies for school staff and health care providers to promote healthy youth development and protect against bullying/sexual harassment involvement.

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