Clinical Presentations of Gang Rape Among Young Adolescent Girls

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Purpose: Patients reporting gang rape are rare in comparison to those with other forms of sexual abuse, and there is little research focused on adolescent victims. The primary aim of this study was to describe contextual events, abuse experiences and disclosure processes for adolescents who presented to a hospital-based Child Advocacy Center (CAC) for medical evaluation and evidentiary collection as indicated after gang rape.

Methods: This study used a retrospective mixed-methods design in which in-depth forensic interviews of gang-raped adolescents, together with physical examinations and lab results, informed researchers’ analyses and findings (N=32). We identified individuals’ demographic, health, psychological and lifestyle characteristics in an effort to identify common experiences and themes, to aid providers in their evaluation of gang-raped adolescents presenting at Emergency Departments or CACs. Analyses focused on revelations about the abuse contexts, trauma responses, and unique challenges in forensic interviews from this type of event. Reports of acute and non-acute physical exam findings and colposcopic results conducted by experienced medical providers were also included.

Results: Patients were age 12 to 17 years (mean, 14 years), with 16% White, 8% African American, 44% Asian, and 12% Hispanic/Mexican. Acute presentation was rare (n=3). Of the 19 teens who allowed a videocolposcopic exam, 6 had a complete healed transaction of their hymen, which was consistent with their reports of vaginal pain and bleeding. Remembering physical symptoms and questioning what had happened to their clothes were the two most common elements reported about the assault. Unlike single offender assaults, gang rape is witnessed by others, including people victims had thought they could trust; victims consistently reported feeling let down by those who could have helped or intervened but didn’t, and felt they had no choice but to give in to a bad situation. Among patients who completed the UCLA PTSD Screening Index, 89% reported symptoms consistent with PTSD. More than half reported self-harm behaviors: 58% were cutting, and 63% reported suicidal ideation. While no victims reported guns or other weapons, nearly all victims (n= 31) reported offenders gave them alcohol disguised as something else and/or in extreme doses, to the point of dangerous biological effects; most mentioned vomiting or blacking out. Patients were rarely able describe offenders or witnesses, which made any police investigations resource intensive.

Conclusions: While relatively rare, gang rape is a type of severe sexual assault experience, with a significant risk factor for deleterious health outcomes that require on-going health care. Alcohol is a common weapon used by offenders, and causes details of the event to be difficult for victims to remember and report in order receive needed physical and mental health care. It is imperative for professionals to be knowledgeable about multiple perpetrator rape so that they can effectively diagnose, treat and support victims.

Sources of Support: Children’s Hospitals and Clinics of Minnesota Educational and Research Committee, and the Canadian Institutes of Health Research.
Beyond the Stereotypes: Variation in Sexual Exploitation Experiences of Youth Evaluated at a Hospital-based Child Advocacy Center
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Purpose: Much of the current research about sexually exploited youth draws from street youth services or programs for exiting, yet clinical services may reach a different population. The primary aim of this study was to describe the abuse experiences of sexually exploited runaway adolescents assessed at a hospital-based child advocacy center. We also sought to identify risk behaviors, attributes of resiliency, laboratory results for sexually transmitted infection (STI) screens, and acute and non-acute genital injuries from video-colposcopic exams.

Methods: This study used a retrospective mixed-methods design with in depth forensic interviews of sexually exploited adolescents, together with their responses on a modified Minnesota Student Survey screening tool, physical exams with video-colposcopy and STI laboratory results (N=57, 50 girls and 7 boys). Forensic interview transcripts were analyzed using content analysis methods along domains of experience and meaning of sexual exploitation events. Univariate descriptive statistics characterized trauma responses and health risks.

Results: Patients ranged in age from 12-19, 25% were African American, 25% White, 21% multi-ethnic, 19% Hmong, 8% American Indian, and 4% were Latino. Qualitative analysis identified that the first sexual exploitation events for many victims occurred as part of seemingly random encounters with procurers when youth needed money, a cell phone, transportation, drugs or shelter. Many were asked “Are you interested?” brief moments after meeting someone. Some youth initially refused solicitation stating, “I’m not that sort of girl.” Older adolescent or adult women recruited some youth working for a pimp, and their loyalty was to this intermediate recruiter. However, half the youth did not report a pimp/boyfriend/trafficker involved in setting up their exchange of sex for money, substances, or other types of consideration; some described purposefully being “independent” and marketing themselves by posting their own ads to exchange sex for money: “I felt rich like it was a good quick way to make money. It was my idea no one talked me into it.” Many youth used avoidance strategies to cope, such as “just not thinking about it” or “wanting to forget this whole thing...it just makes me angry.” However, 78% scored positive on the UCLA PTSD tool; 57% reported DSM IV criteria for problem substance use; 71% reported cutting behaviors, 75% suicidal ideation, and 50% had attempted suicide. 18% had signs of penetrating traumatic genital injury, 37% tested positive for Chlamydia, while only 32% reported condom use at last intercourse. Most youth were still attending school but had extensive truancy, and 40% had an individualized education plan.

Conclusions: Contrary to common depictions, sexual exploitation may occur when youth are still attending school; they may be solicited relatively quickly as runaways, yet exploitation is not always linked having a pimp. Avoidant coping does not appear effective, as most patients exhibited significant symptoms of trauma. Awareness of variations in youth’s sexual exploitation experiences may help researchers and clinicians understand potential differences in sequelae, design effective treatment plans, and develop community prevention programs.

Sources of Support: Sources of Support: Children’s Hospitals and Clinics of Minnesota Educational and Research Committee and the Canadian Institutes of Health
Evidence of Reduction of Aggression and Violent Behaviors After the Positive Youth Potential Curriculum Intervention in the Sixth Grade: A 12-Month Follow-Up in a Rural Indiana Middle School Cluster Randomized Controlled Trial

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Purpose: There is a need for evidence-based violence prevention programs for middle schools, where students experience one of the highest rates of school-based violence relative to students in other grades. We describe promising results from Grade 6 three-year middle school curriculum emphasizing positive youth potential and is responsive to parents in rural northwest Indiana.

Methods: Northwest Indiana rural communities, white population, public middle schools. Positive Youth Potential curriculum; engaging, participatory; multi-media, in the classroom with male-female team; theory-based - positive youth development; future self, goal orientation; parent-adolescent communication; school success; and, healthy choices, risk avoidance decisions. Topics include sexual activity, alcohol, drugs, tobacco, violence, and pornography. 6th grade curriculum is 5 50 min and one multi-media booster assembly session. School-cluster randomized design, pair-blocked by size, Treatment (Tx), usual instruction Control (Co), 6th grade recruitment; 2/16 schools dropped out. Results are from Cohort 1, 407 Co, 419 Tx. Students completed PRE6, FUP6 survey 3-months after instruction and PRE7 Grade 7 survey, 12-month follow-up. We report (A) demographics, (B) one ecologic home environment indicator question (student’s opinion of parent(s) belief about teen sex before marriage (yes, don’t know, no)) and (C) Violence score from mean on 4 questions, 1=yes or 0=no: if in the past year (1) “cyber bullied someone”, (2) “physically bullied someone”, (3) “have been in a physical fight”, and (4) “hurt someone in a physical fight”. Consent rate was 66% Co and 73% Tx. Time of survey administration was matched between Tx and Co.

Results: Analysis and Results: Four level mixed effects regression models (PROC MIXED, SAS) were examined: random effects; time (3), student (1775), classroom (104 [median 15]), school (14); fixed effects covariates: gender, Hispanic, race, age, administration, groups, home environment indicator; p < .05 significance level. Cronbach alpha was .67 for 4 items. Independent observer assessments, educator self-assessments, student feedback, school teacher ratings, and attendance tracking indicated implementation with high fidelity. Demographics: female 48%, Hispanic 11%, white 92%; predominantly 11 (40%), 12 (54%) years of age; 6% reported parent(s) OK with sex before marriage; 47% did not know their parent(s) opinion; 48% reported “my parents believe is that I should not have sex before marriage.” Prevalence of reported youth violence before instruction was: cyber bullied, 9.6%, physical bullied 10.8%, physical fight 31.1%, hurt someone in a fight, 23.0%. Mean PRE6, 12-month Violence values: C0 0.179 and 0.138; Tx 0.192 and 0.130. School and classroom ICCs were under 5%. Interaction of time and group indicated statistically significant reduction and lower Violence score (F 4.24, p < .0397) in the Tx group when compared to the Co group. Youth characteristics were also significant - violence score lower for girls (F 88.88, p < .0001); higher for Hispanic youth (F 5.68, p < .0174); higher when reporting parent(s) belief about sex as OK/I’d don’t know (F 13.1, p < .0001).
Conclusions: Conclusion: Positive Youth Potential Curriculum with multiple and diverse learning objectives for 6th graders made a positive impact 12-months after instruction. Student violence behaviors were lower in the treatment instruction group.

Sources of Support: HHS, Office of Adolescent Health
Firearm Access Documentation in High Risk Clinical Situations: Missed Opportunities
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Purpose: The American Academy of Pediatrics, among other groups, strongly encourages screening for firearm access in pediatric patients, as there is significant morbidity and mortality related to having access to firearms, particularly among youth at risk for suicide. The current study was designed to determine whether health care providers (HCPs) miss opportunities to detect youth access to firearms in particularly high risk situations such as the presence of depression or violence risk.

Methods: Adolescents ages 12-17 scheduled for a routine physical exam in an urban, adolescent medicine clinic between Oct 2010-December 2011 were eligible. Assent from adolescents and consent from parents (both by phone) was obtained to participate in a study assessing violence risk. As part of usual care, youth had the opportunity to answer a standardized health assessment, including whether there were guns in their home. Chart review was completed one month after the appointment. Data collected included youth self-report of violence risk, depression (PHQ-9) and access to firearms in the home and provider documentation of violence risk, mental health diagnosis and the presence of firearms in the home. Rates of each were calculated. Bivariate analysis determined whether there were associations between provider documentation of mental health issues or violence risk and documentation of firearms in the home.

Results: 549/784 (70%) of eligible youth consented, and 85% of those (n=466) actually completed their appointment. Mean age was 14.5 (sd 1.6); 65% female, 45% Hispanic, 38% Black, 17% White. 300/466 (64%) completed the health screening questionnaire. Providers documented a mental health diagnosis in 22% of all patients, including 14% with Depression, 4% with ADHD, and 4% all others. Providers only documented either the presence or absence of a firearm in just 15.9% of these patients, with 2% documentation of the presence of a firearm. Youth who were diagnosed with a mental health issue reported having firearm access 13.8% of the time—only 20% of the time did providers recognize this. For the 14.6% of youth who were positive for moderate-severe depression on the PHQ-9 -in only 8.1% was there documentation of access to firearms. Similarly, 14.6% were positive for future violence risk, and in only 17% was there documentation by providers of firearm access. No demographic characteristics, including age, race/ethnicity, gender or SES were associated with whether a provider documented the presence of a firearm in the home for these high risk youth.

Conclusions: Despite the prevalence of mental health diagnosis and violence risk in this adolescent population, providers are largely not documenting youth access to firearms. Missed opportunities to counsel parents and youth about the risk of firearms in high risk situations can lead to potentially devastating consequences. Ways to document access to firearms needs to be improved.

Sources of Support: Colorado Injury Control Research Center, Children’s Hospital Colorado Research Institute, Deans Academic Enrichment Fund
2011 North Carolina YRBS: Athletic Participation, Violence, and Bullying
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\textbf{Purpose}: Athletic participation may prevent youth from engaging in risky behavior including violence. We sought to determine the association of athletic participation with participation in violence-related activities.

\textbf{Methods}: We used data from the 2011 North Carolina Youth Risk Behavior Survey. This survey is administered to high school students and provides state-representative data on a variety of behaviors. We used two questions related to sports, which asked if the student played a school-sponsored sport that was team-based (e.g., football) or individual-based (e.g., track). We then examined reports of fighting, carrying weapons, and bullying. We used adjusted Wald tests to examine differences in violence by the type of sport played, which adjust for the complex survey design of the NC YRBS.

\textbf{Results}: Half of the 1820 surveyed students ages 14-18 years reported participation in a school-sponsored sport: 25\% team sports, 9\% individual sports, and 17\% both types. Girls who played sports were less likely to have been in a physical fight in the last year (14\% vs. 22\%, p<0.05); there were no differences for boys or by type of sport. Girls playing sports were also less likely to have carried a weapon to school in the past 30 days (6\% vs. 11\%, p<0.05); however, there were no differences for boys or type of sport. There was a non-significant trend towards boys playing sports being less likely to report having been bullied (20\% vs. 25\%, p=0.17). Yet, boys playing only individual sports were more likely to report having been bullied than those playing team sports (29\% vs. 18\%, p<0.01) with a similar trend for girls (41\% vs. 32\%, p=0.14).

\textbf{Conclusions}: Our results suggest that childhood sport participation may have important relationships with violence-related activity. While girls were less likely to fight or carry a weapon when involved in sports, the same protective effect was not seen for boys. Boys who played team sports were less likely to report being bullied than boys who played individual sports. It is not known if boys who play team sports are less likely to be the perpetrators of bullying. Future research should examine why sports may be protective for girls’ but not boys and if interventions involving pediatricians or schools can influence these relationships.

\textbf{Sources of Support}: Provided by UNC CTSA RR025747. The Carolina Postdoctoral Fellowship Program offered support for Dr. Turner. Dr. Skinner is currently supported by BIRCWH (K12-HD01441) and Dr. Skinner and Dr. Lohr by the Eddie and Jo Allison Smith Family Foundation.
A Randomized Controlled Evaluation of the Effects of the Familias en Acción Scholarship Program on Adolescent Violence, Substance Use, and Unsafe Driving
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**Purpose:** The goal of the Texas Healthy Adolescent Initiative is to reduce high risk attitudes and behaviors through a focus on Positive Youth Development. Through the use of Community Based Participatory Action Research methods (CBPR), the members of one Latino community decided to focus on promoting academic achievement as part of the state initiative. Eighteen youth, fourteen parents, and five other community members subsequently determined the content, developed, and implemented the fourteen sessions of the Familias en Acción Scholarship Program. The program focuses on increasing student academic achievement motivation, increasing parental educational support, and addressing perceived potential barriers to accomplish these goals. The purpose of this study was to examine the effects of participation in the Familias en Acción Scholarship Program on attitudes and behaviors in regard to adolescent violence, substance use, and unsafe driving among students in one predominantly Latino school district.

**Methods:** In February, 1,678 students were prospectively randomized in equal proportions to participate in the Familias en Acción Scholarship Program or to be part of a no intervention control group. Students and parents participated in the program in April and June. In August, 186 randomly selected students came to a local public library to complete a confidential self-administered questionnaire. Demographic data; attitudes toward violence, substance use, and unsafe driving; and past 30 day violence, substance use, and unsafe driving were self-reported by participants. Student’s t-tests were used to compare mean scale scores for the three attitude and three behavior outcomes.

**Results:** Of the 186 participants of the survey, 54% were in the intervention group, 91% were Latino, 53% were female, 35% were in middle school, 46% in high school and 19% in college. Students who participated in the Scholarship Program had a more negative attitude toward the use of violence (p=.01) and substance use (p=.01) as compared to students in the control group. Students in both arms had equally negative attitudes toward unsafe driving (p=.37). Students in the intervention group trended toward lower levels of high risk behaviors, however statistically significant differences were not detected for violence (p=.10), substance use (p=.10), or unsafe driving (p=.48).

**Conclusions:** The findings suggest that CBPR can be used effectively with Latino communities to reduce adolescent high risk attitudes and possibly ultimately behaviors. In this study, participating in a program promoting academic achievement was shown to be associated with a more negative attitude toward the use of violence and substance use. Community members subsequently revised the Familias en Acción Scholarship Program based on formative evaluation from the first year. Outcome evaluation data from the second year of the program has been recently collected.

**Sources of Support:** The Texas Department of State Health Services
Relationship Between Cyberbullying Experiences and Depressive Symptoms in Female College Students
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Purpose: Cyberbullying is increasing in prevalence and is a known risk factor for depression during adolescence. Little research has investigated whether the association between cyberbullying and depression is also present during young adulthood, a time of increasing emotional maturity and independence which may lead to greater resilience regarding aggressive online behavior. Due to these developmental differences, we hypothesized that cyberbullying would not be associated with depression in this population. The purpose of this study was to investigate the relationship between cyberbullying and depression among college students, with a specific focus on college females due to the higher prevalence of cyberbullying among adolescent females.

Methods: In this cross-sectional survey, female college students aged 18-25 years were recruited from four universities. Participants completed online surveys assessing history of victimization from and participation in various types of cyberbullying including hacking, text messaging, sexting, and hate speech; in addition, participants completed the Patient Health Questionnaire-9 (PHQ-9) to assess for current depressive symptoms. Logistic regression and t-tests were used to test the association between involvement in cyberbullying and PHQ-9 score.

Results: A total of 265 female participants completed the online survey. Participants were 84.9% Caucasian, 96.6% heterosexual, and had a mean age of 20.2 years (SD=1.7 years). Overall, 27% of participants reported experiences with cyberbullying in college, with 3.0% being cyberbullies, 17.0% being cybervictims, and 7.2% being both cyberbullies and cybervictims, and 17.4% of all participants met criteria for depression on the PHQ-9. The most commonly reported bullying behaviors were: hacking into an online account (13.6%), sending or receiving of unwanted sexual advances through Internet or text message (13.6%), sending or receiving of embarrassing or threatening text messages (10.6%), and posting degrading comments or hate speech (7.2%). After adjusting for race and sexual orientation, participants with any involvement in cyberbullying were more likely to meet criteria for depression (OR=2.9, 95% CI: 1.5-5.8). Involvement with cyberbullying was also associated with higher mean PHQ-9 score (6.8 vs. 4.8, p=0.002).

Conclusions: We found that college females who experienced cyberbullying were more likely to be depressed in young adulthood. Due to the cross-sectional study design, it is unclear whether responses represent a delayed effect of past cyberbullying or sequelae of current cyberbullying. Further research should examine the longitudinal effects of cyberbullying in order to determine the need for cyberbullying prevention efforts in young adults and inform the development of interventions to decrease the risk for depression among young adults who are involved with cyberbullying.

Sources of Support: University of Wisconsin Department of Pediatrics
Personality Assessment in Detained Adolescent Males as Predictors of Aggressive and Antisocial Behaviors

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**Purpose:** Adolescent males are more likely to commit crimes and be the victims of crimes. Additionally, antisocial youth show higher rates of aggression, and are at higher risk for multiple issues, such as school dropout, mental illness, and substance abuse. Unfortunately due to similar externalizing behaviors, antisocial youth are viewed as a homogenous group, and umbrella treatments are potentially unsuccessful. Therefore, research has endeavored to delineate subgroups of antisocial youth to aid in treatment efforts. This study tested three different models of personality to identify individual differences in aggressive and antisocial youth, namely the social and personality, pathological personality, and psychological dysregulation models.

**Methods:** A total of 121 boys (ages 12 to 18; M age = 15.31; SD = 1.16) recruited across 3 detention centers in the state of Louisiana completed a questionnaire that asked about their personality, aggressive behaviors, and delinquent activities. Chart review data was collected for age, ethnicity, and arrest history. Hierarchical regression analyses were conducted to test for unique variance for each of the personality approaches.

**Results:** The three personality models demonstrated unique associations with aggression and delinquency. Psychological dysregulation, composed of behavioral dysregulation, emotional dysregulation, and cognitive dysregulation, was the best overall predictor of overt aggression ($R^2 = .17$, $p < .001$), relational aggression ($R^2 = .10$, $p < .05$), and delinquency ($R^2 = .15$, $p < .001$). After controlling for the Big Five personality traits, psychological dysregulation accounted for significant variance in overt aggression ($\Delta R^2 = .13$, $p < .001$) and delinquency ($\Delta R^2 = .11$, $p < .05$). After controlling for callous-unemotional traits and narcissistic traits, psychological dysregulation accounted for significant variance in overt aggression ($\Delta R^2s = .12$ and .14, $p < .001$), relational aggression ($\Delta R^2s = .07$ and .09, $p < .05$), and delinquency ($\Delta R^2s = .15$ and .15, $p < .001$). The pathological personality traits, comprised of callous-unemotional traits, narcissistic traits, and borderline traits performed second best. Specifically, borderline traits accounted for significant variance in overt aggression ($\Delta R^2 = .11$, $p < .001$), relational aggression ($\Delta R^2 = .03$, $p < .05$), and delinquency ($\Delta R^2 = .05$, $p < .01$) after controlling for the Big Five traits. Narcissistic traits accounted for significant variance in overt aggression ($\Delta R^2 = .04$, $p < .05$) and relational aggression ($\Delta R^2 = .03$, $p < .05$) after controlling for the Big Five personality traits. CU traits accounted for significant variance in overt aggression ($\Delta R^2 = .04$, $p < .05$) after controlling for the Big Five personality traits. The social and personality model, represented by the Big Five personality traits only accounted for significant variance in relational aggression ($\Delta R^2 = .09$, $p < .05$) after controlling for narcissistic traits.

**Conclusions:** Regardless of specific personality traits or types, results highlight the importance of assessing the behavioral, emotional, and cognitive regulatory abilities of detained youth when attempting to understand the underlying factors of aggressive and antisocial behavior. The information may aid in elucidating different pathways to aggressive and antisocial behaviors, and help in the formulation individualized treatment plans.

**Sources of Support:** Psi Chi Faculty Advisor Research Grant