Multiple perpetrator rape among girls evaluated at a hospital-based Child Advocacy Center: Seven years of reviewed cases

Laurel Edinburgh¹,*, Julie Pape-Blabolil¹, Scott B. Harpin², and Elizabeth Saewyc³

¹Midwest Children’s Resource Center, Children’s Hospital and Clinics of Minnesota, St. Paul, MN, USA
²University of Colorado College of Nursing, Aurora, CO, USA
³University of British Columbia School of Nursing, Vancouver, Canada

Abstract

The aim of this study was to describe contextual events, abuse experiences, and disclosure processes of adolescents who presented to a hospital-based Child Advocacy Center for medical evaluation and evidentiary collection as indicated after experiencing multiple perpetrator rape during a single event (n = 32) and to compare these findings to a group of single perpetrator sexual assaults (n = 534). This study used a retrospective mixed-methods design with in-depth, forensic interviews and complete physical examinations of gang-raped adolescents. Patients ranged from 12 to 17 years (M = 14 years). Girls who experienced multiple perpetrator rape during a single event were more likely to have run away, to have drunk alcohol in the past month, and to have participated in binge drinking in the past 2 weeks. Acute presentation of these victims were rare but 30% had hymenal transections and 38% had sexually transmitted infections (STIs). Forensic interviews revealed alcohol was a common weapon used by offenders, and its use resulted in victims experiencing difficulty in remembering and reporting details for police investigation or physical and mental health care. Most victims were raped at parties they attended with people they thought they could trust, and they felt let down by witnesses who could have helped but did not intervene. Although relatively rare, multiple perpetrator rape during a single event is a type of severe sexual assault experience and has significant risks for deleterious health outcomes. These victims require health care by trained providers to diagnose physical findings, treat STIs, screen for trauma, and support victims.

Keywords

Adolescents; Sexual abuse; Alcohol; Runaways; Multiple perpetrator rape; Gang rape

This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/3.0/).

*Corresponding author address: c/o Midwest Children’s Resource Center, Children’s Hospital of St. Paul, 347 North Smith Avenue, St. Paul, MN 55102, USA.
Introduction

The nature and prevalence of *multiple perpetrator rape* during a single event among adolescents in the general population in the United States are extremely difficult to estimate. Cases of this type of sexual assault (i.e., multiple perpetrators and multiple assaults during one instance, also sometimes referred to as *gang rape*) are not tracked within the national crime victimization database, and questions about multiple perpetrator rape are not asked in population-based surveys. In one sample of college-aged adults (Gidycz & Koss, 1990), fewer than 2% of all sexual assault types involved multiple perpetrators. In a study sample of older adolescents presenting at a sexual abuse referral center in England, 11% reported gang rape (Kelly, Lovett, & Regan, 2005), and prevalence has ranged as high as 26% in police database research (Ullman, 2007). Some forms of multiple perpetrator rape are gang-related, while others are not. For example, among 96 gang-involved young women in a study in England, a third had witnessed multiple perpetrator rapes among gang members (Beckett et al., 2013). For the purposes of our study, we use the definition of multiple perpetrator rape defined by Horvath and Kelly (2009): multiple-perpetrator rape occurring within a single assault experience that may or may not be related to gang activity.

Victims of multiple perpetrator sexual assaults in the United States may present for health care in hospital emergency departments, primary care clinics, or at Child Advocacy Centers (CACs). The most common sexual assaults seen in these settings are single perpetrator offenses committed by an acquaintance (Edinburgh, Harpin, Garcia, & Saewyc, 2013). By comparison, one of the least commonly reported sexual abuse types is a multiple perpetrator rape. As a result, less is known about clinical presentation or health sequelae among adolescents of this type than of other forms of sexual assault.

Sexual assaults by single perpetrators may result in genital injuries (Kellogg, Menard, & Santos, 2004; Gavril, Kellogg, & Nair, 2012). Multiple perpetrator rape seems to result in more injuries, but the quality of how these are assessed and characterized in studies has varied widely. Ullman (2007) found that physical findings were more common in multiple perpetrator rape cases among adults than in individual rape cases, though she did not describe the type of findings or how the injuries were assessed. In a literature review of genital injury patterns from sexual assault among post-pubertal adolescent and adult females, Sommers (2007) noted that the prevalence, number and locations of injuries vary widely, although findings are almost always attributed to the sexual assault, without consideration of other possible etiologies, such as prior consensual sexual behaviors. In one study, 63% of adolescents with a history of sexual abuse had a genital injury, and in 29% of these cases the injury was a transection of the hymen (Slaughter, Brown, Crowley, & Peck, 1997). A more recent clinical review of young adolescents (under age 15) who experienced extra-familial sexual abuse found 27% of girls had anogenital injuries (Edinburgh, Saewyc, & Levitt, 2006). Gavril et al. (2012) found that 37% of adolescents had a genital exam finding diagnostic of trauma, and this was seen most commonly between two and nine days post assault. Finally, a recent systematic review of genital injury among pre-pubertal and adolescent sexual abuse victims (Adams, 2008) found that rates vary widely, from 6% to 53%, and were more common in adolescents than in children. These injuries tended to heal
within days, often with no visible evidence, except for the more severe injuries that result in complete transections of the hymen.

Sexually transmitted infections (STIs) and pregnancy can also occur as a result of a sexual assault (Gavril et al., 2012; Hagemann, Nordbo, Myhre, Ormstad, & Schei, 2014; Myhre et al., 2013). The incidence of pregnancy after a sexual assault has been estimated at 5% (Holmes, Resnick, Kilpatrick, & Best, 1996). The rates of STI vary widely and differ by age, from 6% of 12- to 15-year-olds to 20% of 16- to 19-year-olds in a European clinical sexual assault sample (Hagemann et al., 2014). The American College of Obstetrics and Gynecology (2014) reports that unintended pregnancy and STIs are more likely to occur in adolescent patients after a sexual assault because of the relative lack of contraception use in this population. In the years after an adolescent is assaulted by a single perpetrator, sexually abused youth are still more likely to have STIs and unplanned pregnancies, even within consensual relationships (Doll, Koenig, Purcell, 2004; Saewyc, Magee, & Pettingell, 2004; Senn, Carey, Vanable, Coury-Doniger, & Urban, 2006).

The negative mental health effects of sexual abuse during adolescence are significant. Abused youth are more likely to suffer post-traumatic stress disorder, depression, suicidal ideation, substance abuse, and use avoidant coping techniques following an assault (Bal, Van Oost, De Bourdeaudhuij, & Crombez, 2003; Champion, Foley, DuRant, Hensberry, Altman, & Wolfson, 2004; Hagemann et al., 2014; Moran, Vuchinnich, & Hall, 2004). Many youth also experience poor mental health outcomes years following the abuse, including substance abuse, post-traumatic stress symptoms, suicide attempts and self-harm (Danielson, de Arellano, Kilpatrick, Saunders, & Resnick, 2005). Abused youth may also develop other risk behaviors such as running away (Saewyc et al., 2004).

Given the rare likelihood of multiple perpetrator rape among types of sexual abuse, health and forensic research among adolescent victims is limited. Research that focuses on juvenile perpetrators of multiple perpetrator rape is more common. Comparisons of individual versus multiple perpetrator rapes show mixed findings around ethnic distribution of perpetrators but no ethnic differences among victims, and studies also have contradictory findings about how well perpetrators know their victims (Bijleveld, Weerman, Looije, & Hendriks, 2007). In one study of 42 juvenile offenders (age 9–17) from The Netherlands, the average age of victims was 13 years old, the sexual offense was rarely planned, and the victim an acquaintance of at least one of the perpetrators, often of a different racial ethnicity than the perpetrators (Bijleveld et al., 2007). In Ullman’s two studies of adult victims (1999; 2007), she found that perpetrators of these assaults had more alcohol and drug involvement than single assaults, and were more likely to include violence with weapons. The limitations of these studies are twofold: either they extract victim information from criminal records of offenders rather than examination of victims directly, or they are focused on convenience samples of mostly adult women. These studies do not provide sufficient information about adolescent victims of multiple perpetrator rape to inform forensic evaluation and treatment in clinical settings.

At the same time, a single CAC or other clinical setting would have few, if any, cases involving adolescent victims of multiple perpetrator rape in a year, and individual clinicians are likely to have limited professional experience in evaluating and treating these victims.
Existing research literature does not describe forensic interviews with adolescent victims of multiple perpetrator rape, which may involve different kinds of responses and disclosure than in more common single sexual assault or abuse cases. The level and types of details teens are likely to disclose during a forensic interview about their assault are important for comprehensive police investigations, and can provide necessary information to guide their treatment plan.

Given the paucity of data about adolescent victims of multiple perpetrator rape, the primary aim of this study was to describe contextual events of multiple perpetrator rape, including the reported characteristics of the abuse event(s), gynecologic findings, laboratory results for STIs, psychological symptoms of distress, and risky coping behaviors among all adolescent females who presented to a large hospital-based Midwestern CAC after multiple perpetrator rape. A secondary aim of this study was to compare the demographic characteristics, risk behaviors, and symptoms of distress between girls who have been raped by multiple perpetrators during the same event and victims who were sexually assaulted by a single perpetrator who were assessed at the same CAC during the same time period. Our sample differs from that of other studies in that all of the victims were minors at the time of their assessment, forensic interviews about the abuse events were recorded, and all patients were offered physical examinations including video-colposcopy, testing for sexually transmitted diseases and pregnancy.

Methods

This study used a retrospective mixed-methods design in which in-depth, forensic interviews and complete physical examinations of adolescent victims of multiple perpetrator rape were the source of data in the study. The transcribed forensic interviews used a structured protocol based on best practice guidelines within the field, to ask adolescents about their abuse experiences (Lamb, Hershkowitz, Orbach, & Esplin, 2008). Details revealed in the interviews can provide important information about abuse contexts, trauma responses, and the ways victims choose or refuse to disclose their experiences, and this information is augmented by the physical examination data and laboratory results. We identified individuals’ demographic, health, psychological, and lifestyle characteristics from the examinations and charted data to compare victims of multiple perpetrator rape with those of other types of sexual assaults more commonly seen among adolescents presenting for medical care in Child Advocacy Centers. This research was approved by the Children’s Hospital and Clinics Institutional Review Board.

Setting

The Midwest Children’s Resource Center (MCRC) is a hospital-based CAC in St. Paul, Minnesota. As a metropolitan referral center, its staff evaluates approximately 700 child and teenage abuse cases annually. Each year this CAC also receives about 150 referrals of adolescents who have not disclosed sexual assault victimization but who have been identified through a screening and referral process of runaways by police and a school truancy program as young people at high risk for sexual abuse or exploitation (Edinburgh, Saewyc, & Huemann, 2012).
As a hospital-based CAC, MCRC it is staffed by pediatricians specializing in child abuse, pediatric nurse practitioners and registered nurses. The interprofessional team provides comprehensive health assessments for adolescents including: a detailed medical history and self-completed health behavior and trauma symptoms screening, a forensic interview, a complete physical examination, screening for STI and pregnancy, and video-colposcopic genital examination. The two child abuse pediatricians review all genital exams. All healthcare providers receive on-going training that includes NCA-Net peer-review of both their forensic interviews and sexual abuse physical examinations.

Study population
The primary sample for the present study included all cases for which a transcribed interview and/or self-reported assessment and physical exam existed in consecutive cases diagnosed with multiple perpetrator rape in a single event from January 2007 to March 2013. These criteria yielded 33 forensic interviews involving multiple perpetrator rape assaults of 32 girls, who completed self-report assessment questionnaires, had a physical exam, and laboratory data. For the quantitative analyses, the comparison group was comprised of all consecutive cases during the same time period who were diagnosed solely with incest or with sexual abuse by one extrafamilial perpetrator, completed the self-report assessment questionnaire, and had a physical exam and laboratory data (n = 534).

Population-based research has shown similarities in responses among victims of single-perpetrator incest or extrafamilial sexual abuse as opposed to those who have experienced multiple types of sexual abuse (Saewyc et al., 2004), or multiple perpetrator sexual assault, and as these are the most common types of cases of sexual abuse seen in CACs, we felt they comprised the most relevant comparison group.

Data collection
As part of a larger, on-going clinical study, the investigators abstracted data from the charts of patients identified as having been victims of multiple perpetrator rape, using a structured data form and only one investigator to extract the data, to ensure consistency in collection of the data. In addition to gynecologic examination findings, responses to sexual health questions elicited by the clinician during the examination, and STI test results, investigators included data from the clinic’s self-report assessment questionnaire developed for adolescent patients. This questionnaire includes items and scales from the school-based Minnesota Student Survey (Minnesota Departments of Health and Education, 2007) that focused on health and risk behaviors, psychosocial contexts such as school and family relationships, self-esteem, and some limited socioeconomic status measures. The psychometric properties of these measures have been reported in other studies with adolescents generally, and with sexually abused adolescents specifically (Saewyc & Edinburgh, 2010). The assessment also includes the UCLA Post Traumatic Stress Disorder trauma checklist (Steinberg, Brymer, Decker, & Pynoos, 2004), and the Child Report of Parent Behaviors Inventory short 16-item version (CRPBI-16: Bosco, Renk, Dinger, Epstein, & Phares, 2003). The posttraumatic stress disorder (PTSD) screen was first instituted in our clinic in 2011, thus data were missing for the first four years of our timeframe. It should also be noted that in keeping with recommended care for victims of violence that supports their exerting some control over the
assessment process, patients could skip questions or decline to complete the assessment questionnaire altogether.

Gynecologic findings were documented from the recorded video-colposcopic examinations, and were coded using Adams et al.’s approach to interpreting physical and laboratory findings. Researchers restricted classification of positive findings of “genital trauma due to acute sexual assault” to fresh lacerations to the hymen or posterior fourchette without a history of accidental injury or consensual sexual intercourse. Non-acute genital injuries that were coded as “likely due to abuse” were restricted to observations of complete hymenal transections (healed) from an area between 4 and 8 o’clock to the base of the hymen such that there appeared to be virtually no hymenal tissue remaining at that location. All findings were reviewed by a child abuse pediatrician.

Investigators collected qualitative data from the videotaped forensic interviews which had been conducted by experienced nurse practitioners or nurses using a standardized format for forensic examinations. As per protocol, these assault victims were informed they could decline to participate at any time throughout their interview and physical exam. The forensic interviews were video-recorded, and subsequently transcribed verbatim by a professional clinical transcription service.

Analyses

We used an Interpretive Description approach (Thorne, 2008; Thorne, Reimer Kirkham, & O’Flynn-Magee, 2004) for qualitative analysis of the data from the 33 transcribed videotaped forensic interviews from victims of multiple perpetrator rape. This approach taps the clinician-researcher’s experiences and expertise as an element of analysis. The Interpretive Description approach is used more frequently in health science clinical settings also for its flexibility in integrating a variety of data types to describe phenomenon. The transcribed interviews were coded by two investigators (L.E. & J.P.B.), using Atlas.ti software (Atlas.ti., version 7.0) We created the preliminary study codebook by first reviewing all interview transcripts together; then we examined and independently coded every interview before bringing preliminary results to the full research team. Coding reflected emerging and changing interpretations that arose from analyses of the data both within and between interviews. During this process, the full research team met several times to discuss the emerging patterns of results across patients, to synthesize findings, and ensure analyses answered the primary aims of the study.

The quantitative dataset from the charts was cross-checked with the interview data to assure congruence of group assignment as multiple perpetrator rape victim or incest/single perpetrator extrafamilial assault victim. Analyses included demographic comparisons between the multiple perpetrator rape patients and those who experienced other forms of sexual abuse, including age, grade in school, ethnicity, housing circumstances, and whether students had an individualized education plan (IEP), and free/reduced lunch as a measure of socioeconomic status. We also compared mental health and trauma symptoms, running away, and substance use risk behaviors between the multiple perpetrator rape victims and other assault victims. All comparisons used either t-tests or cross tabulations with chi-square, depending on the type of data.
Univariate descriptive statistics were also conducted for gynecologic injuries, timing of exam, and STIs. For instances of missing data, investigators checked patients’ charts to rule out transcription errors. Any variable with more than 20% missing responses was omitted from analysis. While quantitative analyses were completed concurrently with qualitative inquiry, these findings were used primarily to support case findings and were considered to reflect individual experiences and the wider patterns among the cases, as recommended in the Interpretive Description methodology (Thorne et al., 2004).

Results

There were only a few demographic differences between victims of multiple perpetrator rape and those who reported single perpetrator rape experiences (see Table 1). Girls in both groups were age 14 on average and in 8th grade. The girls who experienced multiple perpetrator rape were more likely to self-identify as Hmong (a Southeast Asian ethnic group) and to live with both biological parents, and victims of other assaults were somewhat more likely to reside in settings without a biological parent. Girls who were raped by multiple perpetrators during the same event were less likely to have ever experienced intrafamilial physical abuse compared to those experiencing the other assault types, but were more likely to have reported running away from home in the past year, although we could not determine if running away preceded or followed the multiple perpetrator rape.

Delayed reporting among victims of multiple perpetrator rape in a single event was common (see Table 2). Only three girls had physical exams completed in a timeframe where biological evidence might possibly be found, and one girl had evidence collected nearly 120 h after the assault. Clinically, this group had high rates of chlamydia and gonorrhea. Complete hymeneal transections were present in six teens; two were acute injuries and four were completely healed.

Several qualitative themes emerged as common patterns. The experiences of the girls who were victims of multiple perpetrator rape, and those who report single perpetrator rape are reflected in the quantitative comparisons (see Table 3).

The setup

Most of the teens victimized by multiple perpetrator rape experienced the assault at a party, and they did not foresee any risk in attending the party where they were raped. Alcohol use played a significant role before the multiple perpetrator rape for every teen except one, who was raped during the course of a home invasion. Many of the victims were surprised that alcohol was being served at the party; a few young women described unknowingly entering the risky situation because they thought they were being protected by a friend or relative, for example, one said, “This was the first time I ever went to a party with my sister, and we were going to have fun.” (LV) Another common pattern was being tricked into the situation: “...and then like he got me to this party, and then he likes to share girls when he does, so I didn’t know that he was like that, nobody told me. And yeah, that’s when I got lined up.” (TU)
In many circumstances, alcohol was used as a key weapon in the victimization. Victims sometimes described knowing they were drinking alcohol even if they were being tricked or told that it was not what they were given. One victim explained that she was first told she was drinking water, but her friend was told what they were drinking was “stronger than vodka” (UT). The effects of alcohol ingestion were unexpected, as many had never drank alcohol before. A number of the victims drank large quantities in a relatively short amount of time; as one girl said, “Well I took a sip at first, then I took a little big gobble.” (UT) Most drank enough to cause severe intoxication, based on their described symptoms: “We were drinking and then I started like blacking out” (LL) or, “I couldn’t stand up.” (PO; DX) They talked about how the alcohol affected them: “I just started puking.” (DX), or, “I had a headache and I was really dizzy.” (NL). Once intoxicated, many of the victims appeared oblivious to the potential danger of being raped:

“I was very dizzy at this point, I could barely stand up and stuff like that, and um, then um, we went to watch a movie. So, like okay so then we were walking up the stairs, I could barely walk the stairs, Nicke was in front holding my hand and Mike was holding my waist behind me so that I wouldn’t fall down, because I couldn’t really. . .woo, I was really dizzy.” (NL).

In the clinical assessments, girls raped by multiple perpetrators were significantly more likely than those with other types of assaults to report drinking alcohol in the last 12 months, drinking alcohol a greater number of days in the past month, and binge drinking in the past two weeks (see Table 3). While alcohol use was a common theme in the “set-up” of multiple perpetrator rape, there were few reports of other drugs used in the time preceding the assault. More than 1 in 3 victims reported past year marijuana use, and half that many reported other drug use, but there were no significant differences in marijuana or other drug use between victims of multiple perpetrator rape and those who experienced other types of sexual assaults.

Victimization experiences of multiple perpetrator rape

Significant alcohol consumption limited the amount of information patients were able to describe about being sexually assaulted. “I was drunk, and I can’t remember anything after that,” (FG) was a common theme; “I don’t really remember it because I was drinking. I think he gave me stuff to drink. I don’t really remember.” (BR). Although they usually knew at least one person they went to the party with, most of the victims were unable to identify all the people who assaulted them. Often they could only provide vague descriptions, such as the race, and potentially the number of perpetrators. Questions that normally elicit more descriptive detail in a forensic interview were often answered with, “I don’t know.”

Description of the event—Many of the victims provided details describing the physical restraint that was used during the event and ultimately giving up or giving in to a bad situation because they were physically overpowered.

“There was, two hold my hands at each side, there was two holding my feet, two on each side and there was this one that raped me. And they was taking turns holding me. Cause I couldn’t get up.” Were you struggling to get up, I asked? She said, “Uh-huh.” (yes) “Then he kept asking me if I had money. And I said no, and he
kept repeating over that it was his lucky day, and he just kept calling me the B word. And then I just kept hearing him cussing and cussing and then they held me onto the bed. And I was halfway off the bed, and I had one of them holding my legs and then the other holding my hands, like my arms together.” (RY)

“[He] thought they were going to touch me but Kong was wrong. The one guy put his penis in my mouth so I was choking and could not breathe. The other guy [name] put his penis in my vagina at the same time. I couldn’t move because they were both on me and I couldn’t breathe. I could not even stand it no more. I tried to scream but they said to shut up. I tried to move but I could not even ever do that. They said if I tried to do anything else that they would come and beat up Kong and beat up my mom and dad.” (OX)

“I blacked out, and then he was on top of me, and then his private part stuff did like get on me, and he was forcing me to shove it in my mouth, too, but then I kept pushing him back. And then like I was just pushing him off of me the whole time. And then he just like, I don’t know, I got weak. And then I was still trying to push him, but I couldn’t anymore.” (DX)

Witnesses—In this sample, the girls described being raped by between three and nine men, but in no case could the victim provide a full first and last name of each person raping them. Most girls described other people watching, but when asked to tell everything they remembered about those witnesses, victims would have difficulty with descriptions, saying, for example, “I wasn’t paying attention to them.” Some girls were able to piece together who the offenders were by their relationship to someone else they knew, but even in these instances, it was most common for the victim to be unable to provide a last name, phone number, or where the person lived.

Darkness—One common, specific description of the environment was that victims reported the lights being turned out. When the interviewers would ask, “What did you see?” eleven girls said it was too dark or that they could not see anything. Yet another explanation for not being able to describe what happened to them could be trying to forget in order to cope emotionally. One girl explained that she wanted it over, so she went to sleep. “I sort of pretended and sort of passed out. Who would want to remember any of this anyway? I like to say it didn’t happen but it did. It does not matter. I got drunk. It is my fault. I am stupid.” (NS)

Witnesses

By its very nature, multiple perpetrator rape in a single event is an assault witnessed by others. The witnesses included other offenders or co-victims. Victims noticed that other potential witnesses also included bystanders and potential perpetrators who chose not to participate in the rape. These last two witness groups were very troubling to victims, who did not understand their lack of help. As one girl said, “You would think if he didn’t want to be there he would at least call the police or my mom and let her know. But no one ever did.” (AC) Some girls who did not remember specific details about the rape began to put their
experiences in context because of what witnesses told them later. For example, one victim described:

“When that KARE11 news [local TV network] thing came on, and I posted my stuff about it, VV’s girlfriend was like, ‘Well, you know you chose [sic] to drink the first time and then the second time, you actually opened your legs and said to put it in.’ And I was like, ‘What are you talking about?’” (KO).

After the multiple perpetrator rape

Despite the violent nature of the sexual assault, it was rare for a victim of multiple perpetrator rape to come forward in the immediate aftermath of the incident or receive acute medical care. This occurred in only three of the cases, with a fourth disclosing five days after the assault. As a result, the window for collecting biological evidence and visualizing acute injuries was frequently missed. Of the 19 teens who permitted video-colposcopic examination, six (19%) had a completely healed transection of their hymen, corresponding to injuries incurred as a consequence of their rape.

Since intoxication created difficulties in remembering details related to the assault, interviewers also asked what victims first remembered when they were no longer drunk. Physical symptoms of pain and disarranged clothes were key signs to victims that something had happened.

One girl reported, “. . .and then when I started to sober up, I felt like my anal hole, like it really hurts. And when I went to go pee, I wiped, and then blood started coming out. Yeah, and I didn’t really realize what they had done until. . .” (KO).

Nearly all the victims complained of genital pain. One girl, in describing her memory of pain, said that her vagina “felt inside out and ripped.” (LV). Many victims spoke of vaginal bleeding and seeing blood on their clothes or sheets, but nearly all were able to separate this bleeding experience from their normal menstrual periods. Along with the pain and blood, most girls mentioned noticing their clothes were on differently than they remembered. As one said, “I realized I didn’t have any underwear on, ‘cause it was next to me. And my shoes were off.” (LG). Another young woman remembered what she was wearing before the assault: “I had two pairs of leggings on, so I was pretty sure I didn’t take them off myself.” (DX). The most common memories about clothing were that it was missing, on backwards, or askew. Victims who reported genital pain or changes to their clothing were all fairly confident that something had happened to them, even if they did not remember who had assaulted them.

Giving up

Victims who had memories of their assaults also remembered a moment of feeling that they had no choice but to give into a bad situation because there was no one helping them, and there was no escaping the inevitability of the sexual assault. One victim described it as helplessness from being drunk:

“I was drunk. I was getting out. These 4 guys came and saw me, I guess I knew them. They asked me if I was okay, and I said, I’m drunk out of my mind. And then

they stupidly have the idea, and they asked me if I’d like to fuck ‘em. I said no. They took my by my hands and, of course I was drunk so I couldn’t barely walk, so they took me somewhere which was a blur again, and took me to a basement, and raped me.’” (TG)

Another girl described, “And I realized, you know, fourth time again, I am about to be raped, you know. So in my head I’m like, don’t even fight this, it’s not worth it, cause every time you want to fight this, you always lose.”

Self-blame

Despite having few concrete memories of the event, when victims did remember assault or discovered it afterward, many of them talked about feeling the rape was their fault because of their participation in drinking. Many of the victims blamed themselves. One girl, echoing the beliefs of many others, said, “I feel stupid, just dumb, drunk and stupid. I’m never going to forgive myself for being so dumb.” (OX)

These feelings of emotional distress were reflected in the quantitative findings. Among those screened for PTSD, 9 out of 10 girls who experienced multiple perpetrator rape scored as high likelihood for PTSD diagnosis. Although findings were not statistically significant compared to girls experiencing the other types of single perpetrator sexual assault, the majority of those who were victims of multiple perpetrator rape reported non-suicidal self-harm (60%), suicidal thoughts (64%), and more than 1 in 3 reported suicide attempt in the past year (36%).

Gang branding and fear

Although not all the incidents of multiple perpetrator rape were assaults by gang members or occurred as part of gang membership or initiation, gang involvement among the perpetrator group was a significant aspect of many of these sexual assaults. Among the victims seen at this CAC, gang members that had assaulted the victims included members of Asian Crypts, Bloods, Purple Bloods, To Be Thugs, Latin Kings, TB22s, Two Local Thugs, Orb, or Mafia Pride. The girls talked about many different gangs being involved in multiple perpetrator rape events. However, it was common for a girl to believe only one type of gang committed this type of assault, stating, for example, “He’s an Asian Crypt, but Bloods don’t do that (rape girls).” One girl spoke of how being “lined up” by gang members meant that she would also be labeled a gang member:

“They were like, they say that some girls found me naked in the room. And they were like saying that I got lined by some ACs, and now they are gonna label you as ACG (Asian Crypt Girl). And they were like, ‘why would you be so stupid to drink so much with them?’ And at that point, I was so shocked and terrified, because before that I was still a virgin, yeah. I was so terrified, I started crying a lot and a lot. And they were crying with me too, because they didn’t really expect that to happen. And they were really sorry for not coming.” (NG)

Some of the girls believed the gang would retaliate if they disclosed what happened. Descriptions of threats occurred in about half of the gang-involved rapes, such as, “K told me and said that he would make sure they could beat me up if I told my mom. He said they
were ACs and ACs do a lot of drugs and shoot up houses.” (OX). Another girl said, “Cause if you’re in a gang, like, there’s a lot of people, and they’ll gather all them people up and then just start shooting at you or jump you or try to kill you.”

Disclosure and forensic interview process

Nearly half the patients disclosed their multiple perpetrator rape experience in the course of receiving health care at the hospital-based CAC as part of a larger program to screen runaway youth for abuse. Victims first disclosed their rape experience to a parent, a professional, or to a peer who had subsequently told an adult. Most victims first disclosed because they were asked by a caring adult. Two of the victims blurted out that they had been gang raped during an argument with parents or peers in school, and one teen disclosed after she tested positive for a STI she believed she contracted during the multiple perpetrator rape. A few victims did not want to talk about what had happened. Some of the girls wanted to forget what happened: “I really, honestly, I just want to forget this. Like, I wanna forget this whole thing, I don’t know, it just makes me angry.” (KR). But mostly, victims were forthright in their disclosures. Very few victims cried during the interview, and most appeared to tell their history with detachment, even as they described violent sexual assaults. The most common reaction to the interview process was for a girl to express anger or irritation when she felt a question had already been answered, or she was asked a similar question again to get clarifying information or more detail, as is commonly needed in conducting forensic interviews (Lamb, Orbach, Hershkowitz, Esplin, & Horowitz, 2007).

Discussion

The purpose of this study was to describe the presenting characteristics and abuse experiences of young adolescent women who experienced multiple perpetrator rape. There was a pattern of girls being “set up” which primarily consisted of girls being given alcohol prior to the assault. This finding was similar to Ullman’s retrospective study of adult women victims (2007), although in our study, there appears to be less use of other weapons or threats. Alcohol was an effective weapon, in part because of their developmental naïveté about the effects of alcohol, which, when added to the situational pressure or being tricked into drinking, contributed to these young adolescents’ overall vulnerability. Quantitative comparisons indicated that drinking alcohol in the past month and binge drinking occurred more often in this population than among victims of sexual assaults by a single perpetrator. Although the quantitative data does not indicate whether the drinking began before or after the sexual assault, the interview data showed the girls were often not aware of how alcohol would affect them. In addition to the amount of alcohol ingested, the level of darkness in the room, or in some cases, the traumatic response in not wanting to remember the events, meant most victims were unable to provide specific details about their abusers, the events of the assault, or even the location or address where the multiple perpetrator rape occurred.

The girls described being held down, overpowered and giving up fighting the perpetrators. Whether or not the multiple perpetrator rape occurred in connection to a gang, nearly all the victims blamed themselves for the assault. They often did not recognize the risk in the circumstances, especially if they attended a party with friends, siblings, or boyfriends, who
they presumed would protect them. Yet they still blamed themselves in cases where those they expected to protect them actually contributed to the sexual assault. The girls also expressed feeling very let down by people they thought they could trust. As with Ullman’s (2007) research, the victims were acquainted with at least one of the people at the party or gathering, although not always the perpetrators.

Unlike in Beckett et al.’s (2013) research, these rape victims expressed no knowledge of their rape occurring as a means to obtain gang protection. The gang-related multiple perpetrator rapes did not appear to be motivated by inter-gang rivalry, and they victims were not aware of their rape being a part of theirs or someone else’s gang initiation. Multiple different gangs were identified as perpetrators of these events.

Few rapes were disclosed in a time frame in which biological evidence could be recovered or acute injuries discovered during a physical exam. The qualitative data indicate that victims typically remember bleeding and genital pain after the assault. It was, however, more common for a girl to have a normal genital exam, rather than findings consistent with forceful penetrating trauma. Studies have shown that examination of sexual assault victims often takes place weeks after the event (Edinburgh et al., 2006). As such, it is frequently the case that physical examination reveals no injuries because injuries have healed during that timeframe (Adams, 2008; Hagemann et al., 2014). In our study, genital injuries were observed in 30% of victims, fewer than the 37.1% reported by Gavril et al. (2012). We detected STIs in 37.5% of victims, more than the 15.5% reported by Gavril et al. (2012). This underscores the importance of prompt physical and gynecologic examination of victims to maximize accurate and complete medical documentation of injuries and infection.

Victims who talked about either not remembering the multiple perpetrator rape, or wanting to forget the event, still experienced significant symptoms of mental health distress, such as cutting themselves, suicidal ideation, PTSD symptoms, and suicide attempts. Youth in both the single perpetrator and multiple perpetrator rape situations all had high levels of substance use. Because multiple perpetrator rape is conceptualized as a more severe assault, it was expected that there might be differences in the severity of symptoms between the two groups. Instead, youth in both groups seem to be suffering and showing internalizing symptoms of mental health distress as well as alcohol and marijuana use, but less frequently other drug use. The percentages seen in both groups are dramatically higher than those in the general population of Minnesota high school students (Harpin, Kenyon, Kools, Bearinger, & Ireland, 2013).

The results of this study should be considered with some limitations and strengths. The study included interviews conducted over more than seven years. Clinicians in the CAC gained considerable forensic interview experience with victims of multiple perpetrator rape over that time, and this may have resulted in more detailed information being gathered in interviews conducted later in the review period than during initial interviews. As the purpose of the forensic interview is to elicit information to help with protecting victims from future assault and to receive needed medical care, victims were not asked to contextualize the violence they experienced, as in Beckett et al.’s research about gang violence in England (2013). Such approaches, although useful for research, can contribute to further distress
during a detailed forensic interview and intimate physical exam, so the approach in such interviews is designed to contain the emotional distress and support the victim. At the same time, this mixed-methods approach, using existing forensic interviews, offers detailed information about the events without the necessity of re-interviewing (and potentially re-traumatizing) adolescent victims.

This is a qualitative study with data from a single, Midwest urban CAC, so findings may not completely reflect experiences of victims from other US regions, or from other countries. The present study focused on the experiences of victims of multiple perpetrator rape. It did not focus on the perpetrators, the parents, or solely gang-involved youth. The information obtained was part of an overall health assessment due to a disclosure that a youth had made to someone before being referred to the CAC or was disclosed because youth were asked whether they experienced a sexual assault during a recent runaway event. Because of the unique program that provides comprehensive health care assessments at this CAC, where runaways receive health screening and forensic interviews by the same provider, the findings may not easily translate to other emergency departments, Child Abuse Clinics, or Child Advocacy Centers.

Clinical implications

Because many of the girls struggled to piece together what had happened from hazy recollections while intoxicated and could not identify their perpetrators by name or even where the rape occurred, it may have been difficult for the police to accept a report and begin an investigation. Health care providers who are part of the CAC’s multidisciplinary evaluation team may be able to help law enforcement investigators understand how a victims’ relative inexperience with alcohol and inability to recognize risky contexts in drinking alcohol is developmentally understandable. Our study further suggests that school substance use prevention education might need to cover the potential risks of multiple perpetrator rape while drinking as part of their curriculum. Such education might also need to cover detailed education about sexual consent and the legal ramifications of sex with someone who is intoxicated, especially among younger adolescents, who are developing their norms and values around sexual behavior.

Adolescents who have experienced multiple perpetrator rape are in need of physical exams and comprehensive health care. Sexual Assault Nurse Examiners (SANEs) with clinical supervision from Child Abuse Physicians can contribute important skills to the health care team, especially in responding to the urgent forensic evidence collection needs of these patients in the emergency department setting (www.iafn.org). Physical exams should also occur in non-acute cases to assess and document genital physical findings and STIs that may be result from the rapes. Providers should be sensitive to and screen for traumatic responses in this population, such as PTSD, depression, suicidal ideation, self-harm behaviors, and substance abuse disorders, to allow for the necessary referrals in a timely manner.

Staff should be specially trained in conducting forensic sexual abuse examinations with adolescents, but even then, may need to adapt interview and exam approaches to the challenging circumstances of multiple perpetrator assaults. Interview narratives of events may be more scattered than with other forms of abuse and may be missing expected details,
especially if victims were given enough alcohol to become intoxicated before the assault. Likewise, although victims were given practice narratives in the forensic interview introduction period, typical questions, such as describing a birthday party, may be out of place or inappropriate, given the violence of the assaults or the common context of taking place during parties. It may be challenging for staff to understand why an adolescent might be involved in some of the risky situations described in this study, but it is important for staff to avoid judgmental comments or to reinforce victims’ feelings of self-blame, and instead identify appropriate care and referrals.

Additionally, providers must be familiar with state and local laws regarding mandatory reporting that apply to youth who have experienced multiple perpetrator rape. Regardless of whether there is a police investigation, CAC providers should be familiar with community support and programs that are typically beneficial to adolescent victims, such as specialized mental health screening and treatment, youth shelters with supportive programming, or positive youth development programs. Providers should identify appropriate collaborative relationships if they are unable to provide the necessary screening and ongoing care for adolescents who have experienced multiple perpetrator rape.

Finally, it is worth noting that the trauma and violence associated with multiple perpetrator rapes of adolescents may create difficult interviews and clinical encounters for professionals as well. Vicarious trauma can be an issue for clinicians who work with victims of child sexual abuse (Beck, 2010; Nen et al., 2011; Nimmo & Huggard, 2013). Clinical settings and organizations should ensure necessary levels of emotional support to foster adaptive coping among clinicians who conduct forensic interviews, physical examinations, and ongoing treatment of adolescent victims of multiple perpetrator rape.

Conclusion

This study is one of the first to describe multiple perpetrator rape among adolescent victims, as opposed to the viewpoint of perpetrators or descriptions by adult women remembering a past rape. The girls in this study described significant contextual vulnerability in the events preceding and during the multiple perpetrator rape event, including underage alcohol use at parties, severe intoxication, and darkened rooms, which make police investigation and prosecution difficult. They also talked about a process of realizing what had happened to them afterwards, including injuries and information from peer witnesses. Gang members were involved in about half of the multiple perpetrator rape events that were documented during the seven years of our study. Given the relative rarity of presentations of this type of victimization, this study may help professionals address this severe form of sexual assault experience, with its significant risk for deleterious health outcomes that require on-going health care.

Acknowledgments

The authors would like to acknowledge funding support from Children’s Hospital and Clinics of Minnesota Educational and Research committee for this research. This study was also supported in part by grants #HOA 80059 and #CPP 86374 of the Canadian Institutes of Health Research’s Institute for Population and Public Health and Institute for Gender and Health.

Child Abuse Negl. Author manuscript; available in PMC 2016 February 19.
References

Adams JA. Guidelines for medical care of children evaluated for suspected sexual abuse: An update for 2008. Current Opinion in Obstetrics and Gynecology. 2008; 20:435–441. [PubMed: 18797265]

Adams JA, Kaplan RA, Starling SP, Mehta NH, Finkel MA, Botash RS, Shapiro RA. Guidelines for medical care of children who may have been sexually abused. Journal of Pediatric and Adolescent Gynecology. 2007; 20:163–172.

American College of Obstetricians and Gynecologists. Sexual assault: Committee opinion no. 592. 2014. (Monograph). Retrieved from ACOG website at: http://www.acog.org

ATLAS.ti., Version 7.0. Computer software. Berlin, Germany: Scientific Software Development; 2013.

Bal S, Van Oost P, De Bourdeaudhuij L, Crombez G. Avoidant coping as a mediator between self-reported sexual abuse and stress-related symptoms in adolescents. Child Abuse & Neglect. 2003; 27:883–897. [PubMed: 12951138]

Beck CT. Secondary traumatic stress in nurses: A systematic review. Archives of Psychiatrics Nursing. 2010; 25(1):1–10.

Beckett, H., Brodie, I., Factor, F., Melrose, M., Pearce, J., Shaker, L., Warrington, C. It’s wrong . . .but you get used to it: A qualitative study of gang-associated sexual violence towards, and exploitation of, young people in England. 2013 Nov. Retrieved from Children’s Commissioner website: http://www.childrenscommissioner.gov.uk

Bijleveld CC, Weerman FM, Looije D, Hendriks J. Group sex offending by juveniles: Coercive sex as a group activity. European Journal of Criminology. 2007; 4(1):5–31.

Bosco GL, Renk K, Dinger TM, Epstein MK, Phares V. The connections between adolescents’ perceptions of parents, parental psychological symptoms and adolescent functioning. Applied Developmental Psychology. 2003; 24:179–200.

Champion H, Foley K, Durant RH, Hensberry R, Altman D, Wolfson M. Adolescent sexual victimization, use of alcohol, other substances and other risk behaviors. Journal of Adolescent Health. 2004; 35:321–328. [PubMed: 15450546]

Danielson CK, de Arellano MA, Kilpatrick DG, Saunders BE, Resnick HS. Child maltreatment in depressed adolescents: Differences in symptomatology based on history of abuse. Child Maltreatment. 2005; 10:37–48. [PubMed: 15611325]

Doll, LS., Koenig, LJ., Purcell, DW. Child sexual abuse and adult sexual risk: Where are we now?. In: Koenig, LJ.Doll, LS.O’Leary, A., Pequegnat, editors. From child sexual abuse to adult sexual risk: Trauma, revictimization and intervention. Washington, DC: American Psychological Association; 2004. p. 3-11.

Edinburgh L, Saewyc E, Huemann E. The 10-question tool for police officers: A novel health and psychosocial screening instrument for runaway youth. Office of Juvenile Justice and Delinquency Prevention: Journal of Juvenile Justice. 2012; 1:80–94. Retrieved from www.journalofjuvjustice.org.

Edinburgh L, Saewyc E, Levitt C. Gender differences in extra-familial abuse experiences among very young adolescents. Journal of School Nursing. 2006; 22:278–284. [PubMed: 17172200]

Edinburgh LD, Harpin S, Garcia C, Saewyc EM. Differences in abuse and related risk and protective factors by runaway status for adolescents seen at a Child Advocacy Center. International Journal of Child and Adolescent Resilience. 2013; 1:3–14.

Gavril A, Kellogg N, Nair P. Value of follow-up examinations of children and adolescents evaluated for sexual abuse and assault. Pediatrics. 2012; 129:282–289. http://dx.doi.org/10.1542/peds.2011-0840. [PubMed: 22291113]

Gidyucz C, Koss M. A comparison of group and individual sexual assault victims. Psychology of Women Quarterly. 1990; 14:325–342.

Hagemann CT, Nordbo SA, Myhre AK, Ormskod K, Schei B. Sexually transmitted infections among women attending a Norwegian sexual assault centre. Sexually Transmitted Infections. 2014; 90 http://dx.doi.org/10.1136/sxtrans-2013-051328 (in press).

Harpin SB, Kenyon DB, Kools S, Bearinger LH, Irelad M. Correlates of emotional distress in out-of-home youth. Journal of Child and Adolescent Psychiatric Nursing. 2013; 26:110–118. http://dx.doi.org/10.1111/jcap.12030. [PubMed: 23607822]
Holmes M, Resnick H, Kilpatrick D, Best C. Rape-related pregnancy: Estimates and descriptive characteristics from a national sample of women. American Journal of Obstetrics and Gynecology. 1996; 175:320–325. [PubMed: 8765248]

Horvath MAH, Kelly L. Multiple perpetrator rape: Naming an offence and initial research findings. Journal of Sexual Aggression. 2009; 15:83–96.

Kellogg N, Menard S, Santos A. Genital anatomy in pregnant adolescents: “Normal” does not mean “nothing happened. Pediatrics. 2004; 113:667. [PubMed: 14702498]

Kelly, L., Lovett, J., Regan, L. Home office research study. Vol. 293. London, England: Great Britain Home Office Research Development and Statistics Directorate; 2005. A gap or a chasm? Attrition in reported rape cases. Retrieved from. http://tna.europarchive.org

Lamb, ME., Hershkowitz, I., Orbach, Y., Esplin, PW. Tell me what happened: Structured investigative interviews of child victims and witnesses. Hoboken, NJ: John Wiley & Sons; 2008.

Lamb ME, Orbach Y, Hershkowitz I, Esplin P, Horowitz D. Structured forensic interview protocols improve the quality and informativeness of investigative interviews with children: A review of research using the NICHD investigative interview protocol. Child Abuse & Neglect. 2007; 31:1201–1231. [PubMed: 18023872]

Minnesota Departments of Health and Education. The Minnesota Student Survey. 2007. Retrieved from: http://education.state.mn.us

Moran PB, Vuchinich S, Hall NK. Associations between types of maltreatment and substance use during adolescence. Child Abuse & Neglect. 2004; 28:565–574. [PubMed: 15159070]

Myhre AK, Adams JA, Kaufhold M, Davis JL, Suresh P, Kuelbs CL. Anal findings in children with and without probable anal penetration: A retrospective study of 1115 children referred for suspected sexual abuse. Child abuse & neglect. 2013; 37(7):465–474. [PubMed: 23618719]

Nen S, Astbury J, Subhi N, Alavi K, Lukman ZM, Sarnon N, Fauziah I, Hoesni SM, Mohamad MS. The impact of vicarious trauma on professionals involved in child sexual abuse cases. Pertanika Journal of Social Sciences and Humanities. 2011; 19:147–156.

Nimmo A, Huggard P. A systematic review of the measurement of compassion fatigue, vicarious trauma and secondary traumatic stress in physicians. Australasian Journal of Disaster and Trauma Studies. 2013; 1:37–44.

Saewyc E, Edinburgh L. Restoring healthy developmental trajectories for sexually-exploited young runaways: Fostering protective factors and reducing risk behaviors. Journal of Adolescent Health. 2010; 46:180–188. [PubMed: 2013924]

Saewyc EM, Magee LL, Pettingell SE. Teenage pregnancy and associated risk behaviors among sexually abused adolescents. Perspectives on Sexual and Reproductive Health. 2004; 36(3):98–105. [PubMed: 15306268]

Senn TE, Carey MP, Vanable PA, Coury-Doniger P, Urban MA. Childhood sexual abuse and sexual risk behavior among men and women attending a sexually transmitted disease clinic. Journal of Consulting and Clinical Psychology. 2006; 74:720. [PubMed: 16881780]

Slaughter L, Brown CR, Crowley S, Peck R. Patterns of genital injury in female sexual assault victims. American Journal of Obstetrics and Gynecology. 1997; 176:609–616. [PubMed: 9077615]

Sommers MS. Defining patterns of genital injury from sexual assault: A review. Trauma Violence Abuse. 2007; 8:270–280. [PubMed: 17596344]

Steinberg AM, Brymer MJ, Decker KB, Pynoos RS. The University of California at Los Angeles Post-traumatic Stress Disorder Reaction Index. Current Psychiatric Reports. 2004; 6:96–100.

Thorne, SE. Interpretive description. Walnut Creek, CA: Left Coast Press; 2008.

Thorne SE, Reimer Kirkham S, O’Flynn-Magee K. The analytic challenge in Interpretive Description. International Journal of Qualitative Methods. 2004; 3:1–11.

Ullman SE. Comparing gang and individual rapes in a community sample of urban women. Violence and Victims. 2007; 22:43–51. [PubMed: 17390562]

Ullman SE. A comparison of gang and individual rape incidents. Violence and Victims. 1999; 14:123–133. [PubMed: 10418766]

Edinburgh et al. Page 17
Table 1

Characteristics of adolescents who were experienced multiple perpetrator rape compared to other types of sexual abuse (N = 566).

|                         | Multiple perpetrator rape, n = 32 | Other sexual assaults, n = 534 | t-test |
|-------------------------|----------------------------------|-------------------------------|--------|
| Age (range 12–19 yrs)   | 14.2 (1.52)                      | 14.0 (1.72)                   | 0.59   |
| Grade (range 3–12)      | 8.73 (1.46)                      | 8.6 (1.66)                    | 0.40   |
|                         | %                                | %                             | χ² (d.f.) |
| Ethnicity               |                                  |                               |        |
| White                   | 14.8                             | 19.7                          | 1.2 (1) |
| African American        | 14.8                             | 22.4                          | 0.8 (1) |
| Hmong/Asian             | 48.2                             | 8.3                           | 49.5 (1)*** |
| Latin American/Mexican  | 11.1                             | 6.2                           | 2.0 (1) |
| American Indian         | –                                | 3.5                           |        |
| Multiethnic             | 11.1                             | 19.7                          | 1.1 (1) |
| Do not know             | –                                | 1.9                           |        |
| Live with . . .         |                                  |                               |        |
| Both mom & dad          | 58.0                             | 19.0                          | 15.1 (1)*** |
| Single parent           | 45.0                             | 59.0                          | 1.9 (1) |
| Neither bio parent      | 3.0                              | 20.0                          | 5.6 (1) * |
| Individual education plan |                                  |                               |        |
| Yes                     | 37.0                             | 34.8                          | 0.3 (4) |
| Free/reduced lunch      |                                  |                               |        |
| Yes                     | 82.1                             | 73.7                          | 1.0 (3) |
| Intrafamilial physical abuse |                                  |                               |        |
| Yes                     | 6.5                              | 17.0                          | 2.4 (1) |
| Assault types of youth in “Other assaults” sample | | | |
| Intrafamilial sexual abuse | –                               | 59.2                          | –      |
| One extra-familial perpetrator, once | –                             | 28.5                          | –      |
| One extra-familial perpetrator, many times | –                          | 29.5                          | –      |

* p < .05.
** p < .01.
| Genital injury findings (post-SA) | Gang-raped, n = 32 |
|----------------------------------|-------------------|
| Normal exam                      | 14                |
| Hymen transection                | 6<sup>a</sup>     |
| No exam                          | 12                |
| Acute SA (past 5 days)           |                   |
| Yes                              | 4                 |
| Sexual assault specimen kit collected |      |
| No                               | 27                |
| Yes                              | 4                 |
| Collected in ER other than Children’s Hospital | 1 |
| Pregnant                         |                   |
| No                               | 29                |
| Yes                              | 1                 |
| Treated prophylactically         | 1                 |
| Not tested                       | 1                 |
| Chlamydia                        |                   |
| Yes                              | 9                 |
| Other STI+                        |                   |
| Yes                              | 3                 |

<sup>a</sup>Of these six hymen transections, 2 were acute in nature and 4 were not.
Table 3
Comparisons of risk behaviors, girls who were gang-raped compared to other types of sexual abuse (N= 566).

|                  | Gang-raped, n = 32 | Other assaults, n = 534 | \( \chi^2 \) (d.f.) |
|------------------|-------------------|-------------------------|---------------------|
| **PTSD screen**  |                   |                         |                     |
| Likely           | 90.0              | 59.8                    | 12.0 (1) **         |
| Partial          | –                 | 29.1                    | –                   |
| Screen negative  | 10.0              | 11.1                    | 0.1 (1)             |
| **Self-harm**    |                   |                         |                     |
| Yes              | 60.0              | 50.2                    | 1.1 (1)             |
| **Suicidal ideation** |             |                         |                     |
| Yes              | 64.0              | 52.1                    | 1.3 (1)             |
| **Suicide attempts** |             |                         |                     |
| Yes              | 36.0              | 25.5                    | 2.3 (1)             |
| **Ran away in past 12 months** |             |                         |                     |
| Yes              | 64.3              | 41.1                    | 5.7 (1) *           |
| **Drinking, in last 12 months** |             |                         |                     |
| Yes              | 70.4              | 35.3                    | 17.2 (1) **         |
| **Drinking, in past month** |             |                         |                     |
| 0                | 33.3              | 72.5                    | 21.0 (1) **         |
| 1–2 days         | 33.3              | 13.4                    | 10.5 (1) **         |
| 3–5 days         | 14.8              | 7.8                     | 2.4 (1)             |
| 6–9 days         | 18.5              | 4.3                     | 13.0 (1) **         |
| 10 or more       | –                 | 0.2                     | –                   |
| **Binge drinking in past 2 weeks** |             |                         |                     |
| Never            | 51.9              | 86.8                    | 27.0 (1) **         |
| Once             | 33.3              | 5.3                     | 39.9 (1) **         |
| Twice            | 14.8              | 4.8                     | 6.3 (1) *           |
| 3 or more        | –                 | 2.4                     | –                   |
| **Marijuana, in last 12 months** |             |                         |                     |
| Yes              | 44.4              | 37.7                    | 0.5 (1)             |
| **Marijuana use in past month** |             |                         |                     |
| None             | 63.0              | 73.1                    | 1.7 (1)             |
| 1–2              | 22.2              | 12.3                    | 2.4 (1)             |
| 3 or more        | 14.8              | 14.6                    | 0.1 (1)             |
| **Other drugs in last 12 months** |             |                         |                     |
| Yes              | 15.4              | 13.9                    | 0.1 (1)             |

|                  | M (SD)            | M (SD)                  | t-test |
|------------------|-------------------|-------------------------|--------|
| Age at first use, alcohol\( ^a \) (range 11–17 yrs) | 13.2 (1.22) | 12.68 (1.62) | 1.78   |
| Age at first use, marijuana\( ^a \) (range 11–17 yrs) | 12.8 (1.70) | 12.8 (1.40) | 0.07   |

*Child Abuse Negl. Author manuscript; available in PMC 2016 February 19.*
|                             | Gang-raped, $n = 32$ | Other assaults, $n = 534$ | $\chi^2$ (d.f.) |
|-----------------------------|----------------------|---------------------------|----------------|
| Age of first use, ‘other drugs’ | 12.7 (0.82)          | 13.2 (1.64)               | 1.48           |
| Emotional distress, past 30 days | 2.4 (1.12)          | 2.2 (1.15)               | 1.13           |

*a* “age at first use” is only those youth who reported ever trying that behavior.

*$p < .05$.

**$p < .01$.**