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Multiple types of childhood and adult violence among homeless and unstably housed women in San Francisco

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Abstract

The present study examined the relationship between different forms of childhood violence (emotional, physical, and sexual) and these same forms of violence in adulthood, using a cross-sectional baseline survey of 298 homeless and unstably housed women in San Francisco, California. We also examined other related factors, including mental illnesses diagnosis, sex exchange, jail time, HIV status, and sociodemographic information. Regression analysis indicated that while several of these factors were associated with experiences of violence as an adult, specific types of child violence (e.g. sexual violence) predicted instances of that same type of violence as an adult, but not necessarily other types. Thus, risk of adult violence among low-income women may be better predicted and addressed through histories of same-type childhood violence, despite competing current stressors.

Keywords

abuse; victimization; trauma; low income

Studies suggest that 1/5 to 1/3 of all women in the United States will have been physically assaulted by a partner or ex-partner in their lifetime (Cohen, Deamant, Barkan et al., 2000), with higher rates in more vulnerable populations, such as homeless women (Wenzel, Koegel, & Gelberg, 2000). Indeed, one study found that homeless women experienced attempted or completed rape (25%) and physical assault (63%) more often than a national survey sample of women (8% and 22% respectively; Jasinski, Wesley, Mustaine, & Wright 2005). The higher frequency of victimization among homeless women occurs in the context of high crime (Padgett & Struening, 1992), drug trafficking (Lee et al., 2005; Alexander, 1996) and sex trade (Cohan, Lutnick, Davidson et al., 2006), resulting in a higher burden of psychiatric comorbidity compared to women who have not reported recent violence (Author citation, 2014; Author citation, 2015).

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Violence research among homeless women often focuses on current lifestyle behaviors and less on past histories, such as the role of early experiences in childhood (Stein, Leslie, Nyamathi, 2002). Understanding the role of early life experiences on current victimization underscores the value of early interventions (Stein et al., 2002). In the general population, child violence is estimated to range from 3–27% (Wenzel, Koegel, & Gelberg, 2000), though studies suggest that the burden of prior violence is disproportionally higher among homeless and impoverished women. For example, Anderson and colleagues report that approximately 78% of women in temporary shelters report childhood violence, with high rates of childhood sexual (55%), physical (67%), and emotional violence (90%; Anderson, Boe, & Smith, 1988).

Individuals who are victimized as children are at increased risk for mental and physical health problems (Cohen et al., 2000), such as depression, PTSD, anxiety, and somatic complaints (Messman-Moore, Long, & Siegfried, 2000). They are also at increased risk for subsequent violence during adulthood (Parks, Kim, Day et al., 2011). The association between abusive experiences during childhood and adult violence has been well documented (e.g., Banyard, Arnold, & Smith, 2000; Coid, Petruckevitch, Feder, Chung, Richardson, & Moorey, 2001). One meta-analysis finds that re-victimization occurs among 15–79% of women who were victimized as children (Roodman & Clum, 2001). A review of the literature on sexual re-victimization suggests that 2 out of 3 individuals who are sexually victimized will experience re-victimization (Classen, Palesh, & Aggarwal, 2005). Researchers posit that these experiences of trauma and violence in childhood lead to dysfunctional expectations of relationships (Wyatt, Axelrod, Chin, Carmona, & Loeb, 2000), mistrust of others, or inability to garner stable emotional resources (Attar, Guerra, & Nolan, 1994). Furthermore, studies show that the consequences of re-victimization in adulthood are more serious than single victimization episodes in adulthood (Arata, 2000; Classen et al., 2001).

Research suggests the importance of considering different types of violence, such as emotional, physical, and sexual violence (Norman, Byambaa et al., 2012). However, most research on childhood violence has focused on sexual violence (e.g. Coid et al., 2001; Maker, Kemmelmeir, & Peterson, 2001), and less attention has been given to intersections of different types of violence (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002). In addition, much of the research in childhood and adult violence has relied on student samples (e.g. Arata & Lindman, 2002), random community samples (e.g. Desai, Arias, Thompson, & Basile, 2002; Messman-Moore & Long, 2002), and women sampled from community crisis clinics (e.g. Classen, Field, Koopman, Nevill-Manning, & Spiegel, 2001; Coid et al., 2001). Community-based samples of high risk women are less common. In particular, although violence against impoverished women is known to be common, existing evidence from women outside of health care settings is often lacking, and detail regarding violence type is uncommon.

Building on our prior work showing that almost two-thirds of community-based homeless and unstably housed women experience violence during a six-month time period (Author citation, 2014), here we examined whether the types of childhood violence experienced (emotional, physical, and sexual) predicted the same type of adult violence. A better

understanding of the connection between childhood and adult violence, and their relationship with associated risk factors such as psychiatric diagnoses in homeless populations, could help improve targeted treatment approaches and community interventions.

Methods

Participants were recruited as part of the "Shelter, Health, and Drug Outcomes among Women" (SHADOW), a cohort study aimed at determining health risks among homeless and unstably housed women in San Francisco. Methods for this study have been described elsewhere (Author citation, 2014). Briefly, between June 2008 and August 2010, biological women were recruited from free meal programs, homeless shelters, and a sample of single room occupancy (SRO) low income hotel—selected with probability proportional to the number of female residents. HIV-infected women were oversampled on additional recruitment days to represent 50% of the population, which ensured statistical power to accomplish HIV-specific aims of the cohort study. The inclusion criteria for this study were: biological female sex, older than 18 years of age, and a history of housing instability. Reimbursement of $15 was given for each study interview.

Participants completed confidential interviews administered by trained staff at a community-based field site. Socially sensitive questions regarding sexual and drug use behaviors were administered through an audio computer assisted self-interview (ACASI) program in which participants listened to pre-recorded questions and entered answers directly into a computer. In addition, to avoid interview fatigue, psychiatric assessments were conducted on separate days than the main study interviews. These study procedures were approved by the Committee on Human Research at the University of California at San Francisco.

Measures

This study examined both childhood and adult violence using measures based on the Severity of Violence Against Women Scales (Marshall, 1992), which have been previously tested in this population (Author citation, 2014). Measures included whether or not respondents had ever experienced three types of violence for two time periods: before the age of 18 (childhood violence) and after age 18 (adult violence). Four items measured physical violence (being struck with an object, stabbed, shot, bitten, slapped, hit, choked, or shot), 6 items measured emotional violence (experienced cruelty, harassment, threats, aggression, harm to another person, or loss of property), and one item measured sexual violence (forced sex of any type). For both adult and child violence, we examined whether the participant reported any of the three types of violence: physical (*yes/no*), sexual (*yes/no*), or emotional (*yes/no*).We also examined a composite adult violence outcome variable, which summed the number of violence types experienced as an adult (0–3, where 0 = no violence to 3 = all three types of violence), an approach commonly used in social stress and life event research (Finkelhor, 2007).

Several independent variables were measured, including: age (*years*), HIV status (*HIV-infected/not HIV-infected*), Caucasian race (*yes/no*), graduated high school (*yes/no*), having ever engaged in sex for money, drugs, housing, food, or protection (*yes/no*), and having ever

been jailed (*yes/no*). Psychiatric diagnoses were assessed by the computerized Diagnostic Interview Schedule-IV. Using a model of cumulative psychiatric diagnoses from large national studies (Zimmerman & Coryell, 1988), we assessed the total number of current psychiatric diagnoses, defined by the measurement of 39 conditions (Author citation, 2014). Diagnoses included: mood disorders (dysthymia, major depressive, hypomanic, or manic episodes), anxiety disorders (generalized anxiety disorder, posttraumatic stress disorder, social phobia, specific phobia, agoraphobia, or panic attacks), substance use disorders (PCP, hallucinogens, amphetamines, cocaine, sedatives, opiates, inhalants, marijuana), pain disorder, dementia, and somatization disorder.

Analysis

We computed descriptive statistics to determine the frequency of both child and adult violence. In addition, four regression models were developed to examine the associations between child and adult violence. The first three models examined each type of adult violence—physical, sexual, emotional—individually as separate dichotomous outcomes, using logistic regression. The final model used a Poisson regression with robust standard errors to estimate prevalence ratios for the relationship between child violence and the cumulative summed adult violence variable. All models were analyzed in two steps and pseudo R squared values were calculated for each step. In the first step, we examined whether a particular type of adult violence was predicted by childhood violence variables only. The second step added other factors including number of current psychiatric diagnosis, lifetime sex exchange, lifetime jail time, age, race, education, and HIV status, allowing us to concurrently examine the effects of child violence alongside other known risk factors.

Results

Among 300 study participants, 298 had data available on both adult and childhood violence. We excluded two participants from analysis because they opted out of questions regarding adult violence. On average women were 47 years old (*SD*=8.7), had a median monthly income of $954, 65% graduated from high school, and 50% were HIV-infected. A total of 43% were married or partnered. Participants self-reported their race and ethnicity as Black (44%), Caucasian (30%), Latina (5%), Asian/Pacific Islander (3%) or other ethnicity (18%). Since age 18, women had been homeless for an average of 6 years, 58% reported ever engaging in transactional sex, 72% reported ever spending time in jail. DIS results indicated that the majority of respondents had an alcohol disorder (61%) or drug disorder (75%), with cocaine-related disorders being the most common (65%). Major depressive disorder was the most common single mental health disorder (64%) and anxiety disorders were the most common diagnostic category (74%). The average number of psychiatric diagnoses per participant was 7.90 (*SD*=4.44, range 0 to 12) out of 39 possible diagnoses.

Table 1 provides the prevalence of child violence, adult violence, and other factors associated with the sample. At least one type of child violence was experienced by 70% of participants. Of the 207 women who reported childhood violence, physical violence was the most frequent (80.7%), and 63% of these individuals reported more than one type of childhood violence. Regarding adult violence, most participants reported having experienced

at least one incidence of adult violence in their lifetime (79%). Of the 234 participants who reported adult violence, physical violence was the most common type of violence (91%), and 36.8% of these individuals reported more than one type of violence. The majority of women (62.4%) reported both childhood and adult violence. A total of 43 women (14.4%) did not report any adult or child violence, 21 (7%) reported violence only during childhood, and 48 (16.1%) reported violence only during adulthood.

Table 2 shows correlates of lifetime adult physical, sexual, and emotional violence. Regarding adult physical violence, the strongest violence-type correlate was physical violence experienced as a child (AOR=4.17, $p<0.001$). No other childhood violence was significantly associated with adult physical violence. In analysis adjusting for potential lifetime exposures, the magnitude of association decreased but remained significant (AOR=3.02, $p=0.005$, pseudo $R^2= 0.22$), and lifetime jail time was significant (AOR=2.50, $p=0.022$). Neither sexual nor emotional childhood violence was predictive of adult physical violence.

The odds of adult sexual violence were almost five times higher among individuals who also reported child sexual violence (AOR=4.95, $p<0.001$) and over two times higher among those who reported child emotional violence (AOR=2.33, $p=0.008$; Table 2). The association between childhood physical violence and adult sexual violence did not reach a level of significance. Adjusting for potential lifetime exposures, the magnitude of association increased for both child sexual violence (AOR=6.81, $p<0.001$), and child emotional violence (AOR=2.67, $p=0.02$, pseudo $R^2=0.29$). Current psychiatric diagnoses was also significantly associated with adult sexual violence (AOR=1.09, $p=0.04$).

All types of childhood violence were significantly associated with adult emotional violence. However, when potential lifetime exposures were included, only childhood emotional violence (AOR=3.70, $p=0.001$) and lifetime sex exchange (AOR=2.82, $p=0.004$) were significantly associated with adult emotional violence (Table 2).Women who had experienced emotional violence as a child had almost 4 times the odds of experiencing this same type of violence as an adult, compared to women who had not experienced childhood emotional violence (pseudo $R^2=0.23$).

In Table 3, we examined the sum of adult violence types as an outcome. When examining only child violence factors, all three child violence types were significantly associated with having more types of adult violence. However, in analysis adjusting for potential lifetime exposures, the magnitude of association decreased for physical child violence such that it was no longer significant, while sexual child violence (PR=1.35, $p<0.001$) and emotional child violence (PR=1.35, $p=0.001$) remained significant, along with lifetime sex exchange (PR=1.28, $p=0.01$) and lifetime jail time (PR=1.21, $p=0.04$).

Discussion

Among homeless and unstably housed women with extensive histories of multiple types of victimization, we found that specific types of childhood violence consistently predicted that same type of violence as an adult, over and above other types of violence. Indeed, the odds

of adult violence were 3 to almost 7 times higher among women who reported the same type victimization as a child. Given that the consequences of re-victimization in adulthood are more serious than single victimization episodes in adulthood (Arata, 2000; Classen et al., 2001), and given that both child and adult violence are so common among homeless women, data presented here suggest that targeting services which assume violence-type consistency may help improve or streamline services in this especially high-risk population.

Both child and adult violence were very frequently reported in the current study. Almost two thirds of participants had experienced both child and adult violence. Reports of childhood violence found here are higher than those reported in other studies of child violence (Messman-Moore et al., 2004) or even low-income women (Parks et al., 2011). However, they are comparable to previous studies of homeless women, which report that 49% of women report childhood verbal violence, 31%–72% physical violence and 36%–56% sexual violence (Jasinski et al., 2005; Stein et al., 2002).

The reported child violence occurred before the age of 18 and the average age of participants was 47 years, suggesting a lasting impact of as much as 30 years later. While including factors known to increase the risk of violence in statistical models did not appreciably influence estimates of childhood violence on physical or sexual adult violence, it did reduce the magnitude of association between child violence and adult emotional violence. Specifically, after including lifetime sex exchange, associations between child physical violence and adult emotional violence, as well as child sexual violence and adult emotional violence, decreased. Thus, findings from this cross-sectional study are consistent with the possibility that sex exchange mediates influences of child physical and sexual violence on adult emotional violence, but not the influence of child emotional violence and adult emotional violence.

Traditional demographic variables that are more commonly examined in child violence studies such as age, education, and race did not distinguish between women who did or did not report adult violence. Instead, our study found that psychiatric diagnoses, sex exchange, and jail time were all associated with higher odds of adult violence, thus underscoring the importance of including exposures specific to homeless women when working with this vulnerable population. In our sample, women reported an average of 7.9 psychiatric diagnoses, and our findings suggest that for each additional psychiatric diagnosis, the odds of adult sexual violence increased significantly. However, comparing analysis in which only childhood violence was considered to the full analysis in which all lifetime exposures were included, we found that childhood sexual violence was strongly associated to adult sexual violence, even after simultaneously considering other known factors. Indeed, for adult sexual violence, rather than dampening the effects of childhood sexual and emotional violence on adult sexual violence, inclusion of additional lifetime factors increases the magnitude of effect. Thus, childhood violence exerted a strong influence beyond more proximal exposures.

We also examined whether each individual type of childhood violence was associated with the number of adult violence types experienced. In line with emerging literature on polyvictimization, results revealed that all three childhood violence types were associated

with greater amounts of violence types as an adult (Finkelhor, 2007). Results presented here are consistent with the possibility that sex exchange and jail time may mediate the association between child physical violence and future polyvictimization, which extends this growing body of research.

Limitations and Strengths

Several limitations to the present study should be noted when considering the results. First, although the temporal order is clear between childhood violence and adult violence, data were collected cross-sectionally and thus cannot fully account for causation. Second, the research findings were based on self-reported and retrospective surveys, and thus may be subject to recall bias. Third, we did not ascertain the frequency, duration, and intensity of reported violence. Future research should determine how the characteristics and severity of different types of childhood violence impact adult violence.

One strength of this study was that it was conducted in a difficult-to-reach and highly at-risk population, homeless women. It was also conducted among systematically-sampled study participants from community settings rather than individuals presenting for medical or trauma care. This approach facilitated population estimates rather than estimates among women with perceived health care needs and the ability to obtain care. In addition, this study measured different types of violence and also the same types of violence experienced both as a child and as an adult. This builds upon prior research with homeless women, which often only determines whether or not violence has occurred. Failure to assess the various forms of violence may result in artificially low estimates of violence, and represent an incomplete portrayal of the women's experience, making provision of services and prevention more difficult (Wenzel, Tucker, Hambarsoomian, & Elliot, 2006).

Conclusion

More than 70% of homeless and unstably housed women have experienced childhood violence, 78% have experienced adult violence, and the specific type of violence experienced as a child is associated with that same type of violence experienced as an adult, but not necessarily others. Although many pathways may lead to adult violence, it appears that the same early childhood violence has lasting impact on adult violence, despite years of intervening exposures and stressors.

Effective intervention will rely on accurate understandings of women's violence histories and how these experiences lead to further victimization in adulthood (Collins, Cornley, & Grella, 2002) or other long-term consequences such as chronic physical symptoms, substance abuse, and psychological disorders (Arias, 2004; Springer, Sharidan, Kuo et al., 2003). Results presented here suggest that understanding specific types childhood violence an individual has experienced will aid in tailoring recommendations and interventions to serve the needs of homeless and unstably housed women.

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Table 1

Demographic, lifetime risk factors, and violence factors among homeless and unstably housed women living in San Francisco, CA 2008-1020 (N=298).

	Total Population (N=298)		Sample reporting any child violence (n=208)		Sample reporting any adult violence (n=234)	
Characteristic	***n***	**Prevalence (%)**	***n***	**Prevalence (%)**	***n***	**Prevalence (%)**
Age <47	149	50.0%				
Non-Caucasian race/ethnicity	209	70.1%				
Married (legal or common-law)	45	15.1%				
Income > $954	149	50.0%				
HIV-infected	149	50.0%				
# of current psychiatric diagnoses, *M(SD)*	6.2	2.7				
Any lifetime sex exchange	127	42.6%				
Any lifetime jail time	158	53.0%				
Childhood Violence						
No forms of child violence	91	30.5%				
Any form of child violence	207	69.5%				
Any child physical violence	167	56.0%	168	80.7%		
Any child sexual violence	95	31.9%	95	45.9%		
Any child emotional violence	138	46.3%	139	66.7%		
One form of child violence	76	25.5%	76	36.7%		
Two forms of child violence	69	23.2%	69	33.3%		
All three forms of child violence	62	20.7%	62	30.0%		
Adult violence						
No forms of adult violence	64	21.5%				
Any form of adult violence	234	78.5%				
Any adult physical violence	213	71.5%			213	91.0%
Any adult sexual violence	113	37.9%			113	48.3%
Any adult emotional violence	186	62.4%			186	79.5%
One form of adult violence	52	17.4%			52	22.2%
Two forms of adult violence	86	28.9%			86	36.8%
All three forms of adult violence	96	32.2%			96	41.0%

Table 2

Associations between lifetime adult violence and study factors among homeless and unstably housed women living in San Francisco, CA: 2008–2010 (N=298).

	Adult physical violence		Adult sexual violence		Adult emotional violence	
	Child violence only	All factors	Child violence only	All factors	Child violence only	All factors
Variable	**AOR (95% CI)**	**AOR (95% CI)**	**AOR (95% CI)**	**AOR (95% CI)**	**AOR (95% CI)**	**AOR (95% CI)**
CHILDHOOD VIOLENCE						
Physical child violence	4.17 (2.24, 7.76)***	3.02 (1.40, 6.51)**	1.31 (0.71, 2.43)	0.90 (0.40, 2.02)	1.87 (1.06, 3.30)*	1.47 (0.72, 2.99)
Sexual child violence	2.02 (0.99, 4.08)	1.74 (0.72, 4.25)	4.95 (2.79, 8.79)***	6.81 (3.21, 14.44)***	2.26 (1.17, 4.34)*	1.86 (0.82, 4.22)
Emotional child violence	1.54 (0.79, 3.03)	1.56 (0.67, 3.63)	2.33 (1.25, 4.33)**	2.67 (1.21, 5.88)*	3.68 (1.97, 6.87)***	3.70 (1.69, 8.11)**
LIFETIME RISKS						
# of current psychiatric diagnoses		1.05 (0.96, 1.15)		1.09 (1.01, 1.19)*		1.03 (0.94, 1.12)
Any lifetime sex exchange		1.90 (0.90, 4.01)		2.06 (0.93, 4.56)		2.82 (1.39, 5.71)**
Any lifetime jail time		2.50 (1.14, 5.48)*		1.15 (0.49, 2.73)		1.45 (0.67, 3.11)
CURRENT DEMOGRAPHIC						
Caucasian race		1.92 (0.85, 4.35)		1.24 (0.58, 2.65)		1.51 (0.73, 3.13)
Age		1.0 (0.92, 1.01)		1.03 (0.99, 1.08)		0.97 (0.93, 1.01)
High school graduate		2.13 (0.94, 4.82)		0.89 (0.40, 1.98)		1.53 (0.72, 3.26)
HIV-infected		0.81 (0.39, 1.68)		0.68 (0.33, 1.38)		1.11 (0.56, 2.18)
Cox and Snell R^2	0.15	0.22	0.20	0.29	0.19	0.23

Note. AOR = Adjusted odds ratio, CI = confidence intervals, pseudo R^2 is reported for logistic regression analysis.

* $p<0.05$,

** $p<0.01$,

*** $p<0.001$

Table 3

Associations between the sum of lifetime adult violence types and study factors among homeless and unstably housed women living in San Francisco, CA: 2008–2010 (N=298).

	Child violence only	All factors
Variable	**Adjusted PR (95% CI)**	**Adjusted PR (95% CI)**
CHILDHOOD VIOLENCE		
Physical child violence	1.34 (1.12, 1.59) ***	1.17 (0.96, 1.42)
Sexual child violence	1.37 (1.20, 1.56) ***	1.35 (1.16, 1.58) ***
Emotional child violence	1.35 (1.15, 1.60) ***	1.35 (1.13, 1.61) **
LIFETIME RISKS		
# of current psychiatric diagnoses		1.01 (1.00, 1.03)
Any lifetime sex exchange		1.28 (1.06, 1.54) *
Any lifetime jail time		1.21 (1.01, 1.44) *
CURRENT DEMOGRAPHICS		
Caucasian race		1.12 (0.96, 1.31)
Age		1.00 (0.99, 0.99)
HS graduate		1.12 (0.93, 1.34)
HIV-infected		0.95 (0.81, 1.12)

♈Outcome=0, 1, 2 or 3, indicating the number of violence type experienced as an adult (emotional, physical and sexual), PR = prevalence ratio

* $p<0.05$,

** $p<0.01$,

*** $p<0.001$