Childhood Victimization and Subsequent Risk for Promiscuity, Prostitution, and Teenage Pregnancy: A Prospective Study

ABSTRACT

Objectives. This study examined the extent to which being abused and/or neglected in childhood increases a person's risk for promiscuity, prostitution, and teenage pregnancy.

Methods. A prospective cohorts design was used to match, on the basis of age, race, sex, and social class, cases of abused and/or neglected children from 1967 to 1971 with nonabused and nonneglected children; subjects were followed into young adulthood. From 1989 to 1995, 1196 subjects (676 abused and/or neglected and 520 control subjects) were located and interviewed.

Results. Early childhood abuse and/or neglect was a significant predictor of prostitution for females (odds ratio [OR] = 2.96). For females, sexual abuse (OR = 2.54) and neglect (OR = 2.58) were associated with prostitution, whereas physical abuse was only marginally associated. Childhood abuse and neglect were not associated with increased risk for promiscuity or teenage pregnancy.

Conclusions. These findings strongly support a relationship between childhood victimization and subsequent prostitution. The presumed causal sequence between childhood victimization and teenage pregnancy may need to be reevaluated. (*Am J Public Health.* 1996;86: 1607–1612) Cathy Spatz Widom, PhD, and Joseph B. Kuhns, MA

Introduction

Clinical and behavioral reports and research studies have linked childhood victimization to a variety of negative health and behavioral consequences. Prostitution,1-15 promiscuity,16-26 and teenage pregnancy²⁷⁻³⁴ have been included among these sequelae. From a public health perspective, these consequences of abusive and neglectful early childhood experiences are particularly important in terms of potential sexually transmitted diseases, unwanted and early pregnancies, and the potential to facilitate a youth's transition into prostitution. In addition, any relationship between childhood victimization and teenage pregnancy is important to uncover because of the link between premature parenting and inadequate childrearing practices, factors that perpetuate the cycle of abuse from one generation to the next.

Existing research on the connections between childhood victimization and promiscuity, prostitution, and teenage pregnancy varies in terms of study designs and findings. One of the major limitations of this body of research is its reliance on correlational (cross-sectional) designs, with data collected at one point in time. Correlational studies do not permit examination of causal sequences. For example, one concern in interpreting this literature is that a teenager's pregnancy may have resulted from forced sexual intercourse or from promiscuity or irresponsible contraceptive protection following a history of sexual abuse.33 Another possibility is that the pregnancy could be planned as an escape from an abusive home environment.27 While the majority of this research is based on the belief that childhood victimization leads to certain outcomes, it is possible that some of these problem behaviors precede abuse or

neglect. Finally, reliance on retrospective accounts of childhood victimization leaves the data open to a host of potential biases.^{35–38}

With some exceptions, designs lack appropriate comparison or control groups. Since child abuse is often associated with low-income families,39,40 comparison or control groups are important. Lowincome families often have many problems, child abuse being only one of them. Because other factors, such as poverty, unemployment, parental alcoholism, drug problems, or otherwise inadequate social and family functioning, are often present in such multiproblem homes, control groups matched on socioeconomic status and other relevant variables become vital components of this research.41 The child sexual abuse literature has been fairly vague in separating effects directly related to sexual abuse from effects possibly due to preexisting psychopathology in the child, family dysfunction, or the stress associated with disclosure.42 Such confounding of correlated characteristics needs to be avoided so that the unique contribution of childhood sexual abuse, physical abuse, or neglect can be disentangled from other background characteristics. In sum, while there is correlational evidence that childhood victimization may be associated with increased risk of prostitution, promiscuity, and teenage pregnancy, current knowledge of the extent and nature of these relationships is

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ambiguous, at best, in the absence of longitudinal research.

This paper examines the relationship between early childhood victimization and subsequent promiscuity, prostitution, and teenage pregnancy. The cohort design and analytic techniques used permitted examination of the nature of these relationships longitudinally while controlling for relevant demographic variables. On the basis of previous literature, the overall hypothesis tested was that there would be a direct relationship between early childhood victimization and subsequent promiscuity, prostitution, and teenage pregnancy. It was also hypothesized that victims of childhood sexual abuse would be at a particularly increased risk for promiscuity, prostitution, and teenage pregnancy.

Methods

In the current study, abused and neglected children were matched with nonabused and nonneglected children and followed prospectively into young adulthood.41,43 Characteristics of the prospective design included (1) an unambiguous operationalization of abuse and neglect; (2) separate abused and neglected groups; (3) a large sample; (4) a control group matched as closely as possible for age, sex, race, and approximate family social class background; and (5) assessment of the long-term consequences of abuse and neglect beyond adolescence and into adulthood (for complete details of the study design and subject selection criteria, see Widom⁴¹).

It was important to match for social class in this study because it is theoretically plausible that any relation between child abuse or neglect and the outcomes under investigation would be confounded or explained by social class differences. It is difficult to match exactly for social class because higher income families may live in lower social class neighborhoods, and vice versa. However, the matching procedure used here was based on a broad definition of social class that included neighborhoods in which children were reared, schools they attended, and hospitals in which they were born. Busing was not operational at this time, and students in elementary schools in the study county were from small, socioeconomically homogenous neighborhoods.

Subjects

The abused and neglected group comprised individuals with substantiated

cases of childhood physical and sexual abuse and/or neglect processed during the years 1967 through 1971 in the county juvenile or adult criminal court (situated in a metropolitan area in the Midwest). These cases of early abuse and/or neglect were restricted to children who were 11 years of age or younger at the time of the incident (n = 908).

Physical abuse cases included injuries such as bruises, welts, burns, abrasions, lacerations, wounds, cuts, bone and skull fractures, and other evidence of physical injury. Sexual abuse cases varied from relatively nonspecific charges of "assault and battery with intent to gratify sexual desires" to more specific ones including "fondling or touching in an obscene manner," sodomy, incest, and so forth. Neglect cases reflected a judgment that the parents' deficiencies in child care were beyond those found acceptable by community and professional standards at the time. These cases represented extreme failure to provide adequate food, clothing, shelter, and medical attention to children.

A critical component of this research involved the identification of a matched control group. Children who were under school age at the time of the abuse and/or neglect incident were individually matched with children of the same sex, race, date of birth $(\pm 1 \text{ week})$, and hospital of birth through the use of county birth record information. For children of school age at the time, elementary school records for the same time period were used to find matches with children of the same sex, race, date of birth (± 6 months), and same class in the same elementary school during the years 1967 through 1971. Overall, there were matches for 74% of the abused and neglected children.

Nonmatches occurred for a number of reasons. In terms of birth records, nonmatches occurred in situations in which the abused or neglected child was born outside the county or state or date-of-birth information was missing. In terms of school records, nonmatches occurred because class registers were unavailable as a result of the closing of the elementary school over the past 20 years or lack of adequate identifying information for the abused and neglected children.

Initially, official criminal histories of the abused and neglected children were examined and compared with those of the control group.⁴¹ A second phase of the research involved the locating and interviewing of these abused and/or neglected individuals (20 years after their childhood victimization) and control subjects to document the long-term consequences of childhood victimization across a number of domains of functioning (cognitive and intellectual, emotional, psychiatric, social and interpersonal, occupational, and general health). Two-hour follow-up interviews, conducted between 1989 and 1995, consisted of a series of structured and semistructured questions and rating scales, measures of IQ and reading ability, and a psychiatric assessment. The interviewers were unaware of the purpose of the study and of the inclusion of an abused and neglected group. Similarly, the subjects were unaware of the purpose of the study. That is, subjects were told that they had been asked to participate as part of a large group of individuals who grew up in that area during the late 1960s and early 1970s. Subjects who participated signed a consent form acknowledging that they were participating voluntarily.

The findings described here are based on completed interviews with 1196 individuals. Of the original sample of 1575, 1291 subjects (82%) were located and 1196 were interviewed (76% overall, representing 74% of the abused and neglected group and 78% of the control group). Of the 95 people not interviewed, 39 were deceased, 9 were incapable of being interviewed, and 49 refused to participate (a refusal rate of 3%).

Comparison of the current follow-up sample with the original sample indicated no significant differences in terms of percentage male, White, or abused and/or neglected; poverty in childhood census tract; or mean current age (abuse/neglect group = 28.6 years, control group = 28.9years). The interviewed group (follow-up sample) was significantly more likely to have had an official criminal history than the original sample of 1575 (42% vs 36%). However, this is not surprising since people with a criminal history are generally easier to find, in part because they have more "institutional footprints" to assist in locating them.

Variables

Teenage pregnancy was defined as having had a child before 18 years of age. This was based on a calculation of the age of the oldest child in comparison with the age of the person at the time of the interview. Subjects who indicated that they were less than 18 years old at the birth of their first child were coded as having had a teenage pregnancy (n = 159). Subjects were defined as promiscuous if they reported having had "sex with 10 or more people within any single year" (n = 207). Prostitution was defined as a positive response to a question about whether the person had "ever been paid for having sex with someone" (n = 101). These outcome variables were dichotomous (coded 1 or 0).

Independent variables included childhood victimization as well as control variables of age, sex, and race. Group was a dichotomous variable based on official reports of early childhood abuse and/or neglect (0 = control, 1 = abuse/neglect). In analyses focusing on consequences associated with different types of abuse or neglect, three categories (separate dummy variables) based on official reports of childhood victimization were used: any physical abuse, any sexual abuse, and any neglect. It should be noted that respondents may have experienced more than one type of abuse or neglect.

Multivariate analyses controlled for sex, race/ethnicity, age, and approximate family social class. Race/ethnicity was based on respondents' self-identification. White non-Hispanic was coded 1; all other race/ethnicity categories (Hispanic and non-Hispanic Black, Hispanic White, American Indian, and Pacific Islander) were coded 0. Age was an interval-level variable indicating the person's age at the time of the interview. The mean age of the sample at the time of the interview was 29.2 years (SD = 3.8). As an indicator of the family's approximate social class during the person's childhood, a variable labeled "welfare as a child" was included. A positive score (1) on this dichotomous variable reflected the respondent's report that his or her family had received welfare when the respondent was a child.

Initial results are presented in terms of bivariate statistics. Multivariate analyses using logistic regression were conducted to determine whether the findings at the bivariate level would be supported in adjusted analyses after demographic characteristics had been controlled. Logistic regression equations were estimated with age, race, sex, and welfare as a child as control variables predicting the dichotomous dependent variables of prostitution, promiscuity, and teenage pregnancy. A second set of equations was estimated to examine the contributions of different types of abuse or neglect. Analyses were performed for the overall sample and for male and female subjects separately. These analyses were also replicated with matched pairs only and with a version of conditional maximum likelihood logistic TABLE 1—Prevalence of Promiscuity, Prostitution, and Teenage Pregnancy in a Cohort of 676 Young Adults Abused as Children and in 520 Control Subjects

	No.	Promiscuity, %	Prostitution, %	Teenage Pregnancy, %
Overall	1.			
Abuse/neglect group	676	17.79	10.73**	14.35
Neglect	543	18.92	11.13***	15.29
Physical abuse	110	19.63	12.04*	11.82
Sexual abuse	96	13.68	9.38	12.50
Control group	520	16.99	5.60	11.92
Female subjects				
Abuse/neglect group	338	7.14	8.93**	23.96
Neglect	257	7.84	9.02**	26.46
Physical abuse	47	12.77	12.77**	25.53
Sexual abuse	76	6.58	10.53**	15.79
Control group	244	5.74	2.87	20.90
Male subjects				
Abuse/neglect group	338	28.53	12.54	4.73
Neglect	286	28.87	13.03	5.24
Physical abuse	63	25.00	11.48	1.59
Sexual abuse	20	42.11	5.00	0.00
Control group	276	27.01	8.03	3.99

Note. All statistical comparisons (chi-square tests) were made with the control group. Respondents could be coded 1 for more than one type of abuse (thus, the sum of the abuse/neglect group sizes does not equal the total number of abused/neglected subjects).

*P < .05; **P < .01; ***P < .001 (two-tailed tests).

regression. However, since all subjects, not only matched pairs, were used in the analysis, conditional analyses proved infeasible. The results of these analyses were essentially the same as those presented here.

Results

The first hypothesis examined whether experiencing childhood victimization was associated with increased risk for promiscuity, prostitution, or teenage pregnancy. Table 1 presents the prevalence of promiscuity, prostitution, and teenage pregnancy by group, gender, and type of abuse or neglect. The most striking finding was the lack of difference between the abused/neglected group and the control group (overall and for male and female subjects separately) in terms of promiscuity and teenage pregnancy (see Table 1).

Only the likelihood of engaging in prostitution differentiated childhood abuse and neglect victims from individuals who did not have official records of abuse or neglect, and a significant increase in risk for prostitution was confined to female subjects. The difference in prevalence of prostitution for abused and neglected male subjects vs male control subjects approached, but did not reach, the conventional level of significance. Overall, about 9% of the abused and neglected female subjects, as compared with 3% of the female control subjects, reported having engaged in prostitution. Physically abused female subjects had the highest rates (12.8%) of prostitution, followed by sexually abused (10.5%) and neglected (9.0%)female subjects.

Multivariate results are presented separately for promiscuity (Table 2), prostitution (Table 3), and teenage pregnancy (Table 4). Group (abuse/neglect vs control) was not a significant predictor of promiscuity for the sample overall or for male and female subjects separately (Table 2). Furthermore, none of the specific types of abuse or neglect predicted promiscuity (Table 2).

Group (i.e., childhood abuse or neglect) remained a significant predictor of prostitution, after control for demographic characteristics and welfare as a child, for the sample overall and for female subjects (Table 3). For male subjects, the effect of group did not reach the customary level of significance (P = .13), suggesting that the effect was confined to female subjects. The interaction between gender and group was not significant (P < .14). Childhood sexual abuse was a significant predictor of prostitution in female subjects (Table 3). Neglect also predicted prostitution for the

TABLE 2—Logistic Regressions Predicting Promiscuity in Young Adults Abused as Children

	Overall (n = 1187)		Female Subjects $(n = 580)$		Male Subjects $(n = 607)$	
	OR	95% CI	OR	95% CI	OR	95% CI
Abuse/neglect	1.06	0.77, 1.48	1.07	0.53, 2.16	1.06	0.73, 1.54
Type of abuse						
Sexual abuse	1.57	0.81, 3.06	1.17	0.42, 3.22	2.37	0.91, 6.16
Physical abuse	1.10	0.65, 1.86	1.89	0.73, 4.87	0.90	0.48, 1.67
Neglect	1.14	0.83, 1.59	1.22	0.61, 2.46	1.10	0.76, 1.60

Note. Sample sizes given are both case and control subjects. All statistical comparisons were made with the control group. Age, race, gender, and an indicator of socioeconomic status (receiving welfare as a child) were controlled in the regression equations. OR = odds ratio; CI = confidence interval.

TABLE 3—Logistic Regressions Predicti	ng Prostitution in Young Adults Abused
as Children	

	Overall (n = 1189)		Female Subjects $(n = 580)$		Male Subjects (n = 609)	
	OR	95% CI	OR	95% CI	OR	95% CI
Abuse/neglect	1.88**	1.19, 2.99	2.96*	1.26, 6.96	1.54	0.88, 2.71
Type of abuse Sexual abuse Physical abuse Neglect	1.73 1.79 1.78*	0.80, 3.78 0.94, 3.40 1.15, 2.77	2.54* 2.63 2.58*	1.02, 6.32 0.99, 6.96 1.20, 5.55	0.63 1.35 1.48	0.08, 5.00 0.58, 3.18 0.86, 2.55

Note. Sample sizes given are both case and control subjects. All statistical comparisons were made with the control group. Age, race, gender, and an indicator of socioeconomic status (receiving welfare as a child) were controlled in the regression equations. OR = odds ratio; CI = confidence interval.

*P < .05; **P < .01 (two-tailed tests).

TABLE 4—Logistic Regressions	Predicting Teenage Pregnancy	in Young Adults
Abused as Children		

	Overall $(n = 1196)$		Female Subjects (n = 582)		Male Subjects $(n = 614)$	
	OR	95% CI	OR	95% CI	OR	95% CI
Abuse/neglect	1.10	0.76, 1.59	1.11	0.73, 1.67	1.07	0.47, 2.40
Type of abuse						
Sexual abuse	0.62	0.32, 1.20	0.65	0.33, 1.28		
Physical abuse	1.05	0.55, 1.98	1.31	0.65, 2.64		
Neglect	1.30	0.90, 1.87	1.31	0.87, 1.98		

Note. Sample sizes given are both case and control subjects. All statistical comparisons were made with the control group. Age, race, gender, and an indicator of socioeconomic status (receiving welfare as a child) were controlled in the regression equations. OR = odds ratio; CI = confidence interval.

sample overall and for female subjects, whereas the effect for male subjects did not reach the customary level of significance (P = .16). It should be noted that,

with no control for demographic characteristics or approximate family social class (Table 1), physically abused female subjects had significantly higher rates of prostitution. However, after these factors were controlled for (Table 3), the physical abuse effect became more borderline and not significant.

Table 4 presents the results of logistic regression equations predicting teenage pregnancy by group (abuse/neglect vs control) and by type of abuse or neglect. Surprisingly, neither group nor type of abuse or neglect was a significant predictor of teenage pregnancy for either the overall sample or the females. This finding contrasts dramatically with previous literature, although differences between the present design and others may help explain the discrepancy.

Discussion

Despite widespread belief that childhood victimization is associated with promiscuity, prostitution, and teenage pregnancy, our findings, based on a prospective cohort design, indicate that childhood victimization is not a signifiicant risk factor for promiscuity or teenage pregnancy. That is, we found no significant relationship between early childhood abuse/neglect and promiscuity and teenage pregnancy, either in bivariate or in multivariate analyses that controlled for age, race, sex, and welfare status as a child. Thus, our results do not conform to general expectations or to previous reports about these two outcomes. However, this study differs from most past research in the prospective nature of the design and the inclusion of a control group. The prospective nature of this study allows some issues of causality to be examined and disentangles the effects of childhood victimization from other potential confounding effects.

The outcomes that other researchers have found and attributed to early childhood victimization experiences (particularly sexual abuse) may not be specifically associated with childhood victimization or sexual abuse in particular. Although a high percentage of young women become pregnant as teenagers and many report having experienced earlier sexual abuse, there may be other factors that explain the apparent relationship. For example, Leibowitz et al.44 adopted a primarily economic perspective to explain teenage pregnancy, whereas Cooksey45 examined the effects of family background factors, including family structure and size, parental education and employment status, and religious affiliation. Cooksey46 showed that many background factors predicted premarital pregnancy (e.g., there was a

higher likelihood for Blacks than for Whites or Hispanics and a lower likelihood for individuals with an intact family structure and few siblings).

Thus, high rates of teenage pregnancy may be found in young women who come from economically deprived backgrounds (i.e., from families who may have multiple problems, both including and excluding child abuse or neglect). In previous studies not involving a demographically matched control group, this pattern would not have been evident. Also, because studies often involve pregnant teenagers who are asked about their earlier backgrounds, abused and neglected children who did not become pregnant would not be included, thus providing an incomplete picture of the long-term consequences of early childhood victimization.

On the other hand, we did find that early childhood victimization was associated with increased risk for prostitution, although this was true only for female subjects. These findings reinforce the earlier literature calling attention to the role of childhood victimization in the backgrounds of prostitutes. Early childhood abuse and neglect appear to place children at increased risk of becoming prostitutes, which reinforces the importance of viewing prostitution in a victimization context.

Despite an emphasis on childhood sexual abuse as an antecedent to prostitution, we found that childhood neglect is also associated with increased risk for prostitution. By definition, childhood neglect involves inadequate supervision and inadequate caretaking by a parent or guardian. Bracey4 described juvenile prostitutes as being neglected at home, quoting one young woman who reported that her "parents didn't tell me to get out, but they didn't come looking for me when I did." Neglected young children, on the streets alone, are at risk of being victimized or enticed into prostitution. For example, runaways may come under the control of pornographers and pimps and become susceptible to subsequent physical and sexual victimization by pimps and customers.47

We have also found that abused and neglected children are at increased risk, relative to nonabused and nonneglected control children, of being picked up by the police for running away⁴⁸ and of reporting having run away overnight. The introduction of "running away" into our regression equations to estimate its role as a mediator between childhood victimization and prostitution reduced the contribution of childhood victimization as a predictor of prostitution overall. However, childhood victimization remained a significant predictor (data not shown).

One issue in considering these prostitution findings, however, is the extent to which the relationship between early childhood victimization and prostitution is part of a larger syndrome of problem behaviors for which abused and neglected children are at risk.48 Previous research has indicated that abused and neglected children are at an increased risk of being arrested as a juvenile, as an adult, or for a violent crime.49 Future analyses will attempt to disentangle whether the increased risk of prostitution described here is specific (and should be interpreted in the victimization context) or whether it is part of a lifestyle that places abused and neglected children at increased risk in general for criminal behavior.

Another issue concerns the role substance abuse plays in relation to prostitution. Among Bagley and Young's3 sample of prostitutes, the primary reason for entrance into prostitution reportedly was the need to support a drug habit. Seng's9 sample of prostitution-involved children reported significantly higher rates of alcohol and drug abuse than did the sexually abused children who were not involved in prostitution. Other studies have reported correlations between prostitution and drug use.50-56 Although such an analysis was beyond the scope of the present paper, we plan to examine the relationship between substance use and abuse and prostitution (particularly looking at temporal sequences) in future research.

While this study design has clear strengths, certain caveats should also be kept in mind. First, these cases of childhood abuse and neglect came to the attention of the authorities and were skewed toward the lower end of the socioeconomic spectrum.39 Members of our matched control group came from the same neighborhoods as the abused and neglected children and were also from lower socioeconomic classes. This means that the sample is not representative of the population as a whole and that these findings cannot be generalized to all cases of abuse and neglect. For example, middleand upper-class women who might have experienced childhood sexual abuse were less likely to be included here.

Second, the teenage pregnancy measure used here may have represented an underestimate of the extent of teenage pregnancies experienced. Our measure did not include women who were pregnant but whose pregnancies ended in abortions or miscarriages. It is possible that women whose children died might have failed to mention these children. We hope that other researchers engaged in prospective research with different samples from different geographic areas and time periods will examine these issues and attempt to replicate our findings.

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