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Adolescent Pregnancy and Sexual Risk-Taking Among Sexually Abused Girls

By Jacqueline L. Stock, Michelle A. Bell, Debra K. Boyer and Frederick A. Connell

Data on 3,128 girls in grades eight, 10 and 12 who participated in the 1992 Washington State Survey of Adolescent Health Behaviors were used to analyze the association of a self-reported history of sexual abuse with teenage pregnancy and with sexual behavior that increases the risk of adolescent pregnancy. In analyses adjusting for grade level, respondents who had been sexually abused were 3.1 times as likely as those who had not been abused to say they had ever been pregnant; in multivariate analyses, respondents who had experienced abuse were 2.3 times as likely as others to have had intercourse but were not more likely than other sexually active respondents to have been pregnant. However, those with a history of sexual abuse were more likely to report having had intercourse by age 15 (odds ratio, 2.1), not using birth control at last intercourse (2.0) and having had more than one sexual partner (1.4). Thus, an association between sexual abuse and teenage pregnancy appears to be the result of high-risk behavior exhibited by adolescent girls who have been abused.

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As sexual abuse of female children and adolescent pregnancy have gained increasingly widespread public recognition as problems in our society, the relationship between early abuse and teenage pregnancy also has become a focus of attention. However, differences in definitions of abuse, methods of inquiry and study populations have led to discrepant conclusions.

Some studies of adolescent mothers and pregnant adolescents have documented a high prevalence of sexual abuse, ranging from 43% to 62%.[1] However, other studies of pregnant teenagers have reported a sexual abuse prevalence of 15–26%,[2] rates no higher than those most commonly reported for the general population of women.[3]

Whereas data on a small group of college women suggested that those who had been sexually abused were at no higher risk for early pregnancy than their peers who had not been abused,[4] findings from a population-based sample indicated that women who had been abused before age 18 were at increased risk of having an unintended pregnancy.[5] Among a sample of women considered to be at risk for acquiring HIV infection, those who reported sexual abuse were three times as likely as those who had not experienced abuse to become pregnant before 18 years of age.[6] In a study of sexually experienced adolescents, those who had ever been forced to have sexual intercourse were significantly more likely than others to have ever been pregnant.[7]

While it is clear that forced sexual intercourse may directly result in pregnancy among pubescent adolescents, the path by which sexual abuse at young ages leads to teenage pregnancy is less direct and requires exploration. Consideration of the nature and context of a girl's early sexual experiences is necessary in understanding why some teenagers may be more likely than others to become pregnant. Premature, exploitive and coercive sexual experiences may form the social-emotional context for early pregnancy.[8] Among the possible consequences of childhood sexual abuse are promiscuity and the self-perception of being promiscuous;[9] being the victim of coercive sex later in life;[10] and poor self-concept, low self-esteem and decreased locus of control.[11]

Girls may be placed at increased risk for early pregnancy if they fear that they are unable to conceive. In a study of low-income, nulliparous adolescents, those with a history of sexual abuse were more likely than others to report that they were trying to conceive and feared that they were unable to do so.[12] Although the nature of sexual abuse reported in various studies may differ in terms of type, duration, and relationship and age of the victim and perpetrator, any unwanted sexual experience and the perception of abuse contribute to increased sexual risk behavior and low self-esteem.[13]

In this study, we hypothesized that a history of perceived sexual abuse is associated with adolescent pregnancy and predisposes girls to early pregnancy because of early initiation of sexual activity and other sexual risk factors. Our study goes beyond previous research in this area by comparing the pregnancy experiences of girls who have been sexually abused with those of girls with no history of abuse.

Methods

Study Population and Instrument

We analyzed data from the Washington State Survey of Adolescent Health Behaviors,[14] which was administered to a sample of sixth, eighth, 10th and 12th graders in 70 school districts in December 1992. The survey used a multiple-choice format, giv-

Jacqueline L. Stock was a graduate student in the School of Public Health and Community Medicine, University of Washington, Seattle, when this analysis was conducted. She is now research study manager, Battelle Centers for Public Health Research and Evaluation, Seattle. Michelle A. Bell is associate professor, and Frederick A. Connell is director and professor, maternal and child health services, School of Public Health and Community Medicine; and Debra K. Boyer is affiliate assistant professor, Women's Studies Program—all at the University of Washington, Seattle. This study was supported by grant MCJ9043 from the Maternal and Child Health Bureau, Department of Health and Human Services. The authors are grateful to Carol R. Strong, Eric L. Einspruch and James P. Pollard for assistance in accessing the data; to Allen Cheadle for statistical assistance; and to David Fine for his related groundbreaking work.

ing students up to five possible responses to questions about their ethnicity, drug and alcohol use, health risk factors, sexual activity, and experiences of physical and sexual abuse. Of the 120 questions, 14 asked about sexual activity, abuse and suicide. Some school districts and individual schools excluded this section from the questionnaire; where the questions were included, a preface indicated that students could choose not to answer them.

Surveys were distributed by teachers to each student in their class. Students were told their responses were anonymous and were instructed not to put their name on the response form and to seal their completed survey in an envelope. A designated student delivered all sealed envelopes to the school office.

Cluster sampling was used wherein schools were stratified by region, size and rurality in order to increase the chance of obtaining a representative sample of the Washington State school population. Schools were categorized as rural or urban using definitions from the 1990 census.

The initial sample consisted of 16,610 students. On the basis of quality control measures, 1,317 questionnaires were discarded because of apparently dishonest responses, out-of-range answers, impossible patterns or inconsistent responses. (For example, some girls responded that they had never had sexual intercourse, but also indicated that they had used birth control at last intercourse.) Also excluded were 10,833 questionnaires from males, sixth graders and girls whose school district did not include the questions about sexual activity, abuse and suicide, and 1,332 from girls whose school excluded these questions or who chose not to respond. The final sample included 3,128 girls in grades eight, 10 and 12.

Data and Analyses

The questionnaire asked respondents whether they had ever experienced sexual abuse (defined as "when someone in your family or someone else touches you in a sexual way in a place you did not want to be touched, or does something to you sexually which they shouldn't have done"), whether they had ever been "physically abused or mistreated by an adult," and the number of times they had been pregnant. It also asked about alcohol consumption (quantity and frequency) and drug use (types of drugs and frequency of use).

Teachers administering the survey recorded students' grade level on the questionnaires. The following variables, which we hypothesized would be linked with a report of sexual abuse, were measured by students' responses to multiple-choice survey questions: ethnicity; parental supervision (how often the respondent's parents knew her whereabouts); number of school activities and sports teams the respondent participated in; how frequently she missed school; importance of grades; current grades; plans to attend college; thoughts of dropping out of school; body image; sexual experience; age at first intercourse; number of sexual partners; birth control method used during last intercourse; and suicide thoughts, plans and attempts.

Because dichotomous variables are required for logistic regression analyses, responses to variables with a five-option response format were collapsed. For example, responses about drug use were collapsed into "no use" or "any use."

SPSS for Windows was used for all analyses. The chi-square statistic was used to measure demographic differences between the final sample and respondents who had had no opportunity or had declined to answer the questions pertaining to sexual activity, abuse and suicide.

Logistic regression techniques were used to measure differences between respondents who had been sexually abused and those who had not been abused. To test the hypothesis that sexual abuse contributes to early pregnancy via increased emphasis on sexuality and sexual risk-taking, a series of logistic regression analyses were performed to examine the degree to which a variety of factors were significant predictors of ever having had sexual intercourse and having been pregnant.

Table 1. Percentage distribution of respondents, by self-reported history of abuse, according to pregnancy history and grade, Washington State Survey of Adolescent Health Behaviors, 1992

Pregnancy history and grade	No abuse	Abuse				Total
		Any	Sexual only	Physical only	Both	
All (N=3,055)	**68.6**	**31.4**	**10.1**	**8.7**	**12.6**	**100.0**
8	73.5	26.5	8.4	8.6	9.4	100.0
10	66.9	33.1	11.1	8.9	13.0	100.0
12	63.9	36.1	10.9	8.5	16.6	100.0
Ever-pregnant (N=164)	**39.6**	**60.4**	**12.8**	**12.2**	**35.4**	**100.0**
8	36.4	63.6	9.1	22.7	31.8	100.0
10	43.1	56.9	15.4	9.2	32.3	100.0
12	37.6	62.4	11.7	11.7	39.0	100.0
Never-pregnant (N=2,891)	**70.3**	**29.7**	**9.9**	**8.5**	**11.3**	**100.0**
8	74.3	25.7	8.4	8.3	9.0	100.0
10	68.4	31.6	10.9	8.9	11.8	100.0
12	66.8	33.2	10.8	8.2	14.2	100.0

Results

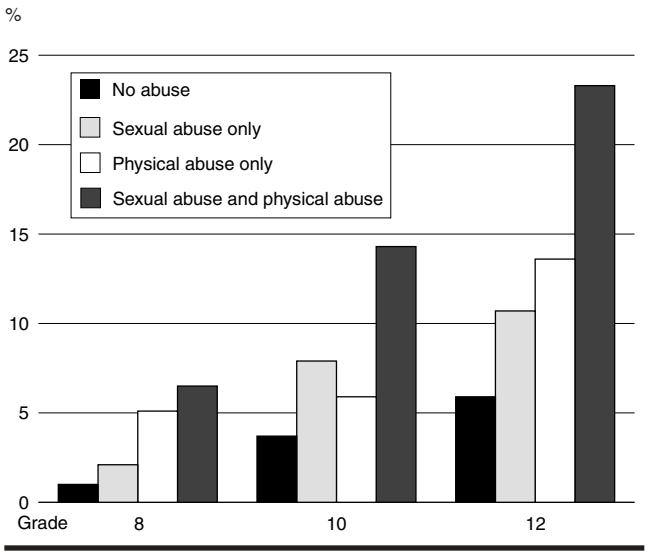
According to respondents' reports, 5% were American Indian, 6% Asian or Pacific Islander, 3% black, 4% Hispanic and 82% white. Most (62%) were from urban schools. Respondents who did not have the opportunity to answer the questions related to sexual activity, suicide and abuse were significantly more likely than those in the final sample to be in eighth grade (59% vs. 38%), to be attending urban schools (84% vs. 62%) and to report that their parents always knew their whereabouts (38% vs. 34%). They were also slightly more likely to report no involvement in school activities (29% vs. 26%) and more likely to report no alcohol use (39% vs. 31%). There were no other significant differences between the two groups.

The prevalence of sexual abuse (with or without physical abuse) increased from 18% among eighth-grade respondents to 24% among 10th graders and 28% among 12th graders (Table 1). Sexual abuse was reported by 48% of students who had been pregnant at least once and 21% of those who had never been pregnant. Some 60% of respondents who reported having been pregnant, but only 30% of those who had never been pregnant, had a history of any abuse (physical or sexual).

In analyses controlling for grade level, girls who had been sexually abused were significantly more likely to report a lack of parental supervision and a history of physical abuse. They reported significantly higher levels of school absenteeism, less involvement in extracurricular activities and lower grades than those with no history of sexual abuse; they also were more likely not to consider grades important, to have thought of dropping out, and to report they definitely or probably would not go to college. Other characteristics associated with a history of sexual abuse were alcohol and drug use, having thought about or attempted suicide, and poor body image.

In each grade, compared with respon-

Figure 1. Percentage of respondents who have ever been pregnant, by history of abuse, according to grade



dents who had no history of abuse, those who had been either sexually or physically abused were approximately twice as likely to have been pregnant, and those who had experienced both sexual and physical abuse were about four times as likely to have had a pregnancy (Figure 1). Overall, when grade level was controlled for, respondents who had been sexually abused were 3.1 times as likely as others to have been pregnant (Table 2). However, in a logistic regression model that adjusted for a variety of risk factors, many of which we found to be associated with a history of sexual abuse, the effect of sexual abuse itself on the risk of adolescent pregnancy was not statistically significant among respondents who had ever had intercourse.

Once we controlled for grade level, respondents reporting sexual abuse were 3.5 times as likely as those with no history of sexual abuse ever to have had intercourse.

Table 2. Odds ratios (and 95% confidence intervals) showing the risk of pregnancy among respondents with a history of sexual abuse and the risk among all sexually active respondents, by selected characteristics

Characteristic	Odds ratio
Sexually abused	3.13 (2.27–4.32)
Sexually active	
Grade 12	2.77 (1.39–5.52)
First intercourse by age 15	2.41 (1.51–3.85)
No school activities	1.88 (1.25–2.82)
No birth control at last intercourse	1.85 (1.19–2.85)
>1 partner	1.65 (1.04–2.61)
Physically abused	1.53 (0.97–2.41)
Sexually abused	0.99 (0.63–1.57)

Notes: Risk for sexually abused respondents is adjusted for grade level only; risks for all sexually active respondents are also adjusted for drug use, grades, dropout thoughts, parental supervision and alcohol use. The reference group for 12th graders is eighth graders.

Moreover, in a logistic regression model controlling for grade level and other factors that increase the odds of ever having had intercourse (which themselves were significantly associated with sexual abuse), sexual abuse retained a significant effect (odds ratio, 2.3—see Table 3).

The survey question "Have you ever had sexual intercourse?" did not rule out inclusion of experiences the respondents perceived as abusive. We have no way of knowing what proportion, if any, of respondents' reported sexual experiences were instances of abuse. Some 14% of eighth graders, 39% of 10th graders and 62% of 12th graders reported having had sexual intercourse. Since a broad definition of abuse was used, it is unlikely that all of the reported abuse involved intercourse.

A history of sexual abuse was also a strong predictor of sexual behavior that increases the risk of teenage pregnancy (Table 4). Respondents who had experienced abuse were twice as likely as others to have had first intercourse by age 15 (odds ratio, 2.1) and to have used no birth control during their most recent sexual encounter (2.0). They were slightly more likely to have had more than one sexual partner (1.4).

Comment

We found that sexual abuse was strongly associated with adolescent pregnancy, primarily through the strong association between sexual abuse and high-risk sexual behavior. The association between sexual abuse and adolescent pregnancy appears mediated in this way for two reasons. First, although a history of sexual abuse was strongly associated with reported sexual intercourse, it was not predictive of pregnancy among girls who had engaged in sexual intercourse. Second, when high-risk sexual behavior, which is strongly associated with sexual abuse, was added to a multivariate model, the effect of sexual abuse on pregnancy was no longer significant.

Clinicians and researchers who work with pregnant teenagers and adolescent parents have stressed that a better understanding of the social-emotional context of early sexual activity, especially premature or coercive sexual experiences, will contribute to understanding teenage pregnancy.[15] Findings from this study suggest that premature and coercive sexual experiences contribute to adolescent pregnancy by increasing the likelihood that teenagers will have earlier sexual intercourse and a greater number of partners, and decreasing the likelihood that they will use birth control.

Among a sample of female students in grades 6–12, one study found that 18% had experienced an "unwanted" sexual encounter.[16] Another analysis, in which sexual abuse was defined as unwanted sexual touching by an adult or by an older or stronger person either outside or inside the family, found a sexual abuse prevalence of 17% among a sample of school-based adolescent females.[17] Similarly, in a sample of school-based adolescent females, the prevalence of forced sexual intercourse was 13%.[18]

The prevalence of sexual abuse in our sample (23%) is higher than the rates reported for adolescents in different geographic regions,[19] but is consistent with findings from retrospective studies that use a definition of sexual abuse not limited to forced sexual intercourse.[20] The prevalence of sexual and physical abuse (60%) among ever-pregnant teenagers in this sample is similar to the prevalence documented for a sample of pregnant and parenting adolescents.[21] The prevalence of sexual abuse among respondents who reported pregnancy (48%) is similar to that in other studies of pregnant adolescents.[22]

The finding that respondents who reported sexual abuse were more likely than others to report a lack of parental supervision is supported by similar findings from an earlier epidemiological study.[23] The overwhelming differences in negative social and health-related behaviors between the students who reported sexual abuse and those who did not expand upon findings from clinical or more limited samples and depict the sad accompaniments of sexual abuse.[24]

Girls who either temporarily or permanently dropped out of school because of pregnancy were not included in the survey. Consequently, this sample represents only those who remained in or returned to school despite a pregnancy. It is possible that girls not in school at the time of the survey had different rates of sexual abuse and other risk factors from girls who remained in school.

Because this survey did not ask respondents the sequence in which pregnancy and abuse occurred, the abuse may have

Table 3. Odds ratios (and 95% confidence intervals) showing the likelihood that respondents had ever had intercourse, by selected characteristics

Characteristic	Odds ratio
Grade 12	10.48 (7.98–13.75)
Grade 10	3.68 (2.87–13.75)
Use alcohol	3.65 (2.75–4.83)
Use drugs	2.81 (2.25–3.50)
Sexually abused	2.26 (1.76–2.90)
Grades mostly <B	1.86 (1.44–2.40)
Physically abused	1.62 (1.25–2.10)
Lack parental supervision	1.67 (1.30–2.15)
No school activities	1.49 (1.18–1.89)
Dropout thoughts	1.38 (1.11–1.71)

Note: The reference group for 10th and 12th graders is eighth graders.

taken place after the pregnancy for some who reported both experiences. Biologically and developmentally, however, it seems more plausible that sexual victimization would have preceded pregnancy. Several epidemiologic studies have found that in the general population of women, 60–80% of incidents of abuse occur before 11 years of age, while 20–28% occur among adolescents.[25] Studies of adolescent parents and pregnant teenagers have also reported young mean ages at first molestation (9.7 and 11.5 years, respectively).[26]

We do not know whether this sample differs from other samples with regard to the age at onset of abuse or the proportion of girls abused during adolescence. In our sample, 18% of eighth graders and 28% of 12th graders reported a history of sexual abuse. This difference may reflect that as young girls age, they experience additional incidents of abuse, develop greater awareness of what constitutes abuse or become more willing to disclose prior abuse.

Table 4. Odds ratios (and 95% confidence intervals) showing the likelihood that respondents engaged in high-risk sexual behavior, by selected characteristics

Behavior and characteristic	Odds ratio
First intercourse by age 15	
Sexually abused	2.09 (1.45–3.00)
Use drugs	1.70 (1.23–2.33)
Dropout thoughts	1.43 (1.03–1.98)
No birth control at last intercourse	
Sexually abused	2.00 (1.37–2.91)
Use drugs	1.43 (1.00–2.04)
>1 sexual partner	
Grade 12	2.96 (1.95–4.50)
Use drugs	2.19 (1.64–2.92)
Grades mostly <B	1.90 (1.38–2.63)
Sexually abused	1.40 (1.01–1.95)

Notes: Odds ratios are adjusted for grade level, alcohol use, parental supervision, physical abuse, activity involvement and grades. The reference group for 12th graders is eighth graders.

A small number of respondents may have become pregnant as a result of abuse. For them, at least one incident of abuse may have been directly related to a reported pregnancy.

Further, because sexual abuse may be perpetrated by peers as well as older men, adolescent pregnancy may mask sexual abuse.[27] Since the survey did not question respondents about the age of the perpetrator of sexual abuse, some may have reported on incidents involving peers. Consequently, findings must be interpreted according to a definition of sexual abuse that is not limited by the age of the perpetrator, but that encompasses any sexual experience perceived as forceful or coercive. However, in one analysis, the perpetrators of abuse were, on average, at least six years older than their victims,[28] and many retrospective studies have indicated that perpetrators are at least five years older than their victims.

Some critics may question the authenticity of information regarding sexual abuse obtained via self-report. Cultural receptivity to reports of abuse has generally improved over time.[29] Reasons for a girl not to report a history of sexual abuse far outweigh any speculations as to why one might falsely report sexual abuse on an anonymous survey. The tendency in reporting is to understate the prevalence of abuse.[30] Further, the perception of abuse is equally important in predicting feelings of low self-esteem.[31]

Maltreatment of any kind has been increasingly implicated as a strong factor in adolescent pregnancy.[32] The fact that pregnancy rates in this sample were also high among girls who suffered physical but not sexual abuse illustrates the need for further study of how a history of physical abuse contributes to an increased risk of early pregnancy. It is notable that in analyses controlling for grade level and sexual abuse, physical abuse approached significance as a factor predicting pregnancy and was significant in predicting the likelihood of ever having had sexual intercourse.

Also of importance is consideration of how nonparticipation in extracurricular activities could play a role in predicting pregnancy. Decreased participation may simply be a result of or concomitant with numerous predisposing risk factors. On the other hand, encouragement and support for girls to participate in activities may contribute to preventing early pregnancy.

Adolescent pregnancy is a multidimensional public health problem. Therefore, successful prevention strategies must address its many, complex aspects, including the important role of sexual abuse. Policy directives at the national level must set the stage for recognizing the costly consequences of sexual abuse. Thorough and routine inquiry regarding exposure to sexual abuse among school-age and adolescent girls may be helpful in targeting girls for prevention of teenage pregnancy, as well as for other needed counseling and support, particularly in the areas of sexual behavior and use of birth control.

Emphasis on primary prevention of undesirable experiences (for example, childhood and adolescent sexual abuse) would contribute to decreasing subsequent tragic and costly outcomes. The private nature of sexual abuse makes the task of primary prevention formidable, but crucial.

References

1. D. Boyer and D. Fine, "Sexual Abuse as a Factor in Adolescent Pregnancy and Child Maltreatment," *Family Planning Perspectives*, **24:**4–11, 1992; J. R. Butler and L. M. Burton, "Rethinking Teenage Childbearing: Is Sexual Abuse a Missing Link?" *Family Relations*, **39:**73–80, 1990; H. P. Gershenson et al., "The Prevalence of Coercive Sexual Experience Among Teenage Mothers," *Journal of Interpersonal Violence*, **4:**204–219, 1989; and M. McCullough and A. Scherman, "Adolescent Pregnancy: Contributing Factors and Strategies for Prevention," *Adolescence*, **26:**809–816, 1991.

2. M. Bayatpour, R. D. Wells and S. Holford, "Physical and Sexual Abuse as Predictors of Substance Use and Suicide Among Pregnant Teenagers," *Journal of Adolescent Health*, **13:**128–132, 1992; and N. P. Medora, A. Goldstein and C. von der Hellen, "Variables Related to Romanticism and Self-Esteem in Pregnant Teenagers," *Adolescence*, **28:**159–170, 1993.

3. D. Finkelhor, "Current Information on the Scope and Nature of Child Sexual Abuse," *The Future of Children*, Vol. 4, No. 2, 1994, pp. 31–53.

4. M. E. Fromuth, "The Relationship of Childhood Sexual Abuse with Later Psychological and Sexual Adjustment in a Sample of College Women," *Child Abuse and Neglect*, **10:**5–15, 1986.

5. G. E. Wyatt, *Sexual Abuse and Consensual Sex*, Sage, Newbury Park, Calif., 1993.

6. S. Zierler et al., "Adult Survivors of Childhood Sexual Abuse and Subsequent Risk of HIV Infection," *American Journal of Public Health*, **81:**572–575, 1991.

7. S. Nagy, R. J. DiClemente and A. G. Adcock, "Adverse Factors Associated with Forced Sex Among Southern Adolescent Girls," *Pediatrics*, **96:**944–946, 1995.

8. H. P. Gershenson et al., 1989, op. cit. (see reference 1).

9. J. H. Beitchman et al., "A Review of the Short-Term Effects of Child Sexual Abuse," *Child Abuse and Neglect*, **15:**537–556, 1991; and D. M. Elliott and J. Briere, "Sexual Abuse Trauma Among Professional Women: Validating the Trauma Symptom Checklist-40 (TSC-40)," *Child Abuse and Neglect*, **16:**391–398, 1992.

10. J. H. Beitchman et al., 1991, op. cit. (see reference 9); and M. E. Fromuth, 1986, op. cit. (see reference 4).

11. W. R. Downs, "Developmental Considerations for the Effects of Childhood Sexual Abuse," *Journal of Interpersonal Violence*, **8:**331–345, 1993; N. P. Medora, A. Goldstein and C. von der Hellen, 1993, op. cit. (see ref-

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erence 2); and B. C. Miller, B. H. Monson and M. C. Norton, "The Effects of Forced Sexual Intercourse on White Female Adolescents," *Child Abuse and Neglect*, **19:**1289–1301, 1995.

12. D. Y. Rainey, C. Stevens-Simon and D. W. Kaplan, "Are Adolescents Who Report Prior Sexual Abuse at Higher Risk for Pregnancy?" *Child Abuse and Neglect*, **19:**1283–1288, 1995.

13. P. I. Erickson and A. J. Rapkin, "Unwanted Sexual Experiences Among Middle and High School Youth," *Journal of Adolescent Health*, **12:**319–325, 1991; and M. E. Fromuth, 1986, op. cit. (see reference 4).

14. E. L. Einspruch and J. P. Pollard, "Washington State Survey of Adolescent Health Behaviors," Washington State Office of Superintendent of Public Instruction, Washington State Department of Health, Olympia, and Northwest Regional Educational Laboratory, Portland, Oreg., 1992.

15. H. P. Gershenson et al., 1989, op. cit. (see reference 1); and D. Boyer and D. Fine, 1992, op. cit. (see reference 1).

16. P. I. Erickson and A. J. Rapkin, 1991, op. cit. (see reference 13).

17. M. A. Lodico, E. Gruber and R. J. DiClemente, "Childhood Sexual Abuse and Coercive Sex Among School-Based Adolescents in a Midwestern State," *Journal of Adolescent Health*, **18:**211–217, 1996.

18. S. Nagy, R. J. DiClemente and A. G. Adcock, 1995, op. cit. (see reference 7).

19. M. A. Lodico, E. Gruber and R. J. DiClemente, 1996, op. cit. (see reference 17); and P. I. Erickson and A. J. Rapkin, 1991, op. cit. (see reference 13).

20. D. Finkelhor, 1994, op. cit. (see reference 3).

21. D. Boyer and D. Fine, 1992, op. cit (see reference 1).

22. J. R. Butler and L. M. Burton, 1990, op. cit. (see reference 1); H. P. Gershenson et al., 1989, op. cit. (see reference 1); and M. McCullough and A. Scherman, 1991, op. cit. (see reference 1).

23. D. Finkelhor, "Epidemiological Factors in the Clinical Identification of Child Sexual Abuse," *Child Abuse and Neglect*, **17:**67–70, 1993.

24. J. N. Briere and D. M. Elliott, "Intermediate and Long-Term Impacts of Child Sexual Abuse," *The Future of Children*, Vol. 4, No. 2, 1994, pp. 54–69; W. R. Downs, 1993, op. cit. (see reference 11); and S. Nagy, A. G. Adcock and M. C. Nagy, "A Comparison of Risky Health Behaviors of Sexually Active, Sexually Abused, and Abstaining Adolescents," *Pediatrics*, **93:**570–575, 1994.

25. J. M. Cupoli and P. M. Sewell, "One Thousand Fifty-Nine Children with a Chief Complaint of Sexual Abuse," *Child Abuse and Neglect*, **12:**151–162, 1988; D. Finkelhor, 1993, op. cit. (see reference 23); and C. L. Greenwood, E. G. Tangalos and T. Maruta, "Prevalence of Sexual Abuse, Physical Abuse, and Concurrent Traumatic Life Events in a General Medicine Population," *Mayo Clinic Proceedings*, **65:**1067–1071, 1990.

26. D. Boyer and D. Fine, 1992 op. cit. (see reference 1); and H. P. Gershenson et al., 1989, op. cit. (see reference 1).

27. R. S. Hunter, N. Kilstron and F. Loda, "Sexually Abused Children: Identifying Masked Presentations in a Medical Setting," *Child Abuse and Negect*, **9:**17–25, 1989.

28. H. P. Gershenson et al., 1989, op. cit. (see reference 1).

29. J. R. Conte, "Child Sexual Abuse: Awareness and Backlash," *The Future of Children*, Vol. 4, No. 2, 1994, pp. 224–232; and E. Olafson, D. L. Corwin and R. D. Summit, "Modern History of Child Sexual Abuse Awareness: Cycles of Discovery and Suppression," *Child Abuse and Neglect*, **17:**7–24, 1993.

30. D. Finkelhor, 1994, op. cit. (see reference 3).

31. P. I. Erickson and A. J. Rapkin, 1991, op. cit. (see reference 13); and M. E. Fromuth, 1986, op. cit. (see reference 4).

32. E. Becker-Lausen and A. U. Rickel, "Integration of Teen Pregnancy and Child Abuse Research: Identifying Mediator Variables for Pregnancy Outcome," *Journal of Primary Prevention*, **16:**39–53, 1995.