The prevalence and correlates of abuse among children with autism served in comprehensive community-based mental health settings[☆]

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Abstract

Objective: To determine the demographic and psychosocial correlates of physical and sexual abuse among children with autism.

Methods: Data collected from 1997 to 2000 through the national evaluation of the Comprehensive Community Mental Health Services for Children and their Families Program on 156 children with autism were used. Data included a baseline assessment of child and family psychosocial experiences and presenting problems associated with referral into system-of-care service, demographic information, and a clinical record review to obtain psychiatric diagnosis. Binary and multinomial logistic regression was used to determine the association of different characteristics of children who were abused compared with those who were not abused.

Results: Caregivers reported that 18.5% of children with autism had been physically abused and 16.6% had been sexually abused. Physically abused children more likely had engaged in sexual acting out or abusive behavior, had made a suicide attempt, or had conduct-related or academic problems. Sexually abused children more likely had

engaged in sexual acting out or abusive behavior, suicidal or other self-injurious behavior, had run away from home, or had a psychiatric hospitalization. In adjusted multivariate models, the relationship between sexual abuse and sexual acting out, running away from home and suicidal attempts persisted.

Conclusion: Based on the prevalence of abuse and its association with various behaviors, clinicians should be as attuned to the psychosocial histories of children with autism as they are for other children, and consider the potential of abuse when these behaviors are observed.

Background

A growing body of research suggests that children with mental impairments and developmental disabilities are at an increased risk of physical and sexual abuse (Westcott & Jones, 1999). Sullivan and Knutson (2000) merged administrative records from one midwest city to find that 31% of children in the special education system had a record of being maltreated, compared with 9% of other children. Using similar methods, they found elevated risks for abuse and neglect among hospitalized children as well (Sullivan, Knutson, Scanlan, & Cork, 1997). Data from the Second National Incidence Study of Child Maltreatment found the risk of maltreatment among disabled children to be between 1.6 and 2.2 times that of other children (Crosse, Kaye, & Ratnofsky, 1993). Smaller studies of abuse among clinical samples of children with developmental disabilities and multiple impairments have reported prevalence estimates between 40 and 60% (Ammerman, Hersen, Van Hesselt, Lubetsky, & Sieck, 1994; Ammerman, Van Hesselt, Hersen, McGonigle, & Lubetsky, 1989; Newport, 1991; Westcott, 1993). These numbers are quite possibly underestimates, since cognitive and verbal deficits mean that disabled children either may not be able to communicate about the abuse or may not be believed when they do report abuse (Coles, 1990; Robb, 1990; Tharinger, Horton, & Millea, 1990).

In their reviews of related research, Howlin and Clements (1995) and Ammerman, Hersen, and Lubetsky (1988) suggest that child-related reasons for this increased risk of sexual abuse include long-term dependency on caregivers, a tendency toward unquestioning compliance, lack of knowledge about sex or sexuality and sexual abuse, and poor communication skills. They also suggest that insecure attachment between mother and child due to early separation from the mother, the disappointment of having an impaired child, rejection and hostile feelings toward the impaired child, deficits in behaviors that promote attachment, and disappointment due to unrealistic expectations regarding behavior and abilities may increase the risk of physical abuse. There is little empirical evidence, however, to support these hypotheses.

While much has been written about the association between parental stress and maltreatment (Browne, 1986; Egelend & Brunnquell, 1979; Gelles, 1973), and increased stress among parents of children with disabilities (Bradshaw & Lawton, 1978; Gallagher, Beckman, & Cross, 1983), there are few empirical studies examining the relationship between family stress and abuse. Sullivan and Knutson (2000) found that the number of family stressors was associated with the risk of abuse, and Ammerman et al. (1994) found that lack of maternal social support was associated with abuse. Westcott and Cross (1996), however, caution against treating disability as a stressor or risk factor for abuse per se, and suggest that researchers examine more specific child, family, and social factors that may be associated with abuse.

Because of their social isolation and poor communication skills, children with autistic spectrum disorders may represent a group at particular risk of physical and sexual abuse (Howlin & Clements, 1995), although the only large-scale, community-based study published in this area found rates of abuse for children with autism similar to those in the general population (Sullivan & Knutson, 2000). For the most part, only case studies have characterized abuse among this group (Cook, Kieffer, Charak, & Leventhal, 1993; Perkins & Wolkind, 1991). In addition, the majority of studies of the prevalence and correlates of abuse among children with disabilities were conducted using institutionalized samples, whereas most children with autism are served in the community (Jacobson & Mulick, 2000; Jarbrink & Knapp, 2001). Researchers in this area have argued that hospitalized samples of maltreated children may oversample those with disabilities (Coon, Beck, & Coon, 1980; Sullivan & Knutson, 2000); Berkson (1946) points out that in the study of the association of any two health conditions, if there is a given probability of entering a hospital associated with each of the two conditions (in this case, ASD and being abused), an individual with both conditions has a higher probability of entering a hospital than an individual with just one, thereby increasing the probability of observing an association between the conditions when studying hospitalized populations.

There is a lack of studies regarding the association of ASD and abuse in community settings, and characteristics among this group of children that might either increase their risk of being abused or be a clinical indication of abuse. Given recent increased interest in ASD and the growing number of children who receive this diagnosis (Fombonne, 2003), it becomes important to understand the psychosocial experiences of these children in order to adequately serve them. The purpose of this study was to provide evidence regarding the prevalence of physical and sexual abuse among children with autism served in the community, and to examine psychosocial, demographic and clinical characteristics associated with abuse.

Methods

Data source

This study makes use of data collected as part of the congressionally mandated national evaluation of the Comprehensive Community Mental Health Services for Children and their Families Program. As of October 2003, the Substance Abuse and Mental Health Services Administration's Center for Mental Health Services (CMHS) Child and Family Branch had funded 92 programs in 47 states and two territories of the United States to implement systems of care for children with serious emotional disturbance and their families. The goal of these systems is to provide comprehensive and co-ordinated community-based mental health services in a culturally appropriate manner that meet the individualized needs of the child and family and are delivered in the least restrictive environment possible (CMHS, 1999).

The evaluation of this initiative was designed as a multilevel study to gather information on system development, service delivery practices, and child and family outcomes. The latter component involves longitudinal data collection from children and families to assess multiple life domains of behavior and functioning. Relevant to the current study, the longitudinal data collection efforts include a thorough baseline assessment of child and family lifetime experiences including abuse status and presenting problems associated with referral into system-of-care service, the collection of demographic information, and a clinical record review to obtain psychiatric diagnostic information. In an effort to maintain consistency

across participating communities, children and their caregivers served as the primary informants for the longitudinal data collection effort, with caregivers providing the subset of information included in the current study. One exception, as noted above, was psychiatric diagnosis, which was abstracted from the clinical record. Evaluation data used in the current study were collected between 1997 and 2003 from 45 communities awarded these grants in 1997 through 2000. A more detailed description of the national evaluation protocol and its various components can be found elsewhere (CMHS, 1999; Holden, Friedman, & Santiago, 2001).

Sample selection

Of the 9,313 youth who were enrolled into the national evaluation between 1997 and 2003 and had been assigned a psychiatric diagnosis, approximately 2% ($n = 182$) were diagnosed with either autistic ($n = 26$) or Asperger's disorders ($n = 156$). Psychiatric diagnoses were evaluated and assigned using standards from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (American Psychiatric Association, 2000), and were abstracted from the clinical record at the time of children's entry into service. The data collection protocol required abstracting a current psychiatric diagnosis as determined by a qualified mental health professional from the agency referring the child into system-of-care service. Youth with the diagnosis of autistic or Asperger's disorder were included in the current analysis if their caregivers answered structured questions regarding the child's history of sexual abuse and physical abuse. Eighty-six percent ($n = 156$) of the children with autistic or Asperger's disorders met this criterion and are included in the current study sample. Children in the current study sample did not differ from those not selected with regard to their average age ($p = .37$), sex ($p = .49$), or racial/ethnic composition ($p = .45$).

Indicators

Sexual and physical abuse indicators

At the time of children's intake into service, their caregivers participated in a structured clinical interview during which they were asked questions regarding demographic, service use, and psychosocial information. The questions were presented in the following manner: "I am going to ask you some questions about (child's name)'s background and family and about services which (child's name) has received." The questions asked of caregivers included "has (child's name) ever been physically abused?" and "has (child's name) ever been sexually abused?" Each question could be answered as "yes" or "no." Information gathered on the report of this maltreatment was subject to state-specific mandatory reporting requirements and was considered in the development of the child's treatment plan.

Demographic information

Information on children's age, race/ethnicity, and gender was collected via structured interview from their caregivers at the time of children's intake into service. The low prevalence of many racial and ethnic categories necessitated the creation of a dichotomized race/ethnicity variable of minority (African-American, Hispanic, Native American, Asian, and "other") and nonminority (European-American) youth.

Presenting problems

Information on presenting problems was gathered during structured interviews with caregivers at children's intake into services. Caregivers were shown a list of 33 possible presenting problems and asked to identify those that led to children being referred for services. For the purpose of the current study, these problems were collapsed into 10 categories: self injury, suicide-related problems (attempt or ideation), somatic problems (e.g., eating or sleeping problems, internalizing problems) (e.g., anxious, sad, poor self-esteem), hyperactivity/attention problems, conduct-related problems (e.g., physical aggression, extreme verbal abuse, noncompliance), sexual acting out or sexual assault, social contact problems (e.g., social contact avoidance, poor peer interaction), and strange behavior.

Psychosocial characteristics

Information on the presence or absence of five lifetime psychosocial experiences of the child, including whether the child had ever experienced a psychiatric hospitalization, run away from home, attempted suicide, abused alcohol or other drugs, or had been sexually abusive, was gathered from caregivers via structured interview at the time of their child's intake into services.

Analyses

Analyses were conducted in two stages. First, bivariate logistic regression analyses were performed to assess the relationship between each independent variable of interest (demographic characteristics, presenting problems, psychosocial characteristics, and whether children had autistic or Asperger's disorder) and both dependent variables (physical and sexual abuse).

In the second stage of the analyses, two multinomial logistic regression models were conducted to examine (1) the association of demographic characteristics and presenting problems with physical and sexual abuse, and (2) the association of demographic and psychosocial characteristics with physical abuse. Multinomial logistic regression was used because it allows for the simultaneous comparison of children in the three abuse status categories, while adjusting for all other variables entered into the model. The coefficients associated with each variable represent odds ratios (OR) of a particular demographic characteristic or presenting problem for children in physical and sexual abuse groups relative to those who have never been abused.

Presenting problems and psychosocial characteristics were not presented in the same model because of concerns about power. Three mutually exclusive categories were created for the dependent variable in this analysis. Children were considered to have experienced "no abuse" if they had neither a history of physical nor sexual abuse. Children were considered to have experienced "physical abuse" if they had a history of physical abuse but no sexual abuse. Children were considered to have experienced "sexual abuse" if they had a history of sexual abuse, regardless of the presence of physical abuse. Only seven caregivers reported that their children had been both physically and sexually abused. This small number precluded separating this group from those who had been either physically or sexually abused, or making meaningful comparisons among the four groups (not abused, physical abuse only, sexual abuse only, and both physically and sexually abused). Sexual abuse took precedence over physical abuse for two reasons. First, analyses of the entire sample from the national evaluation of the Comprehensive Community Mental Health Services for Children and their Families Program suggested that, while the three abuse groups

were similar across demographic characteristics, those who were both physically and sexually abused were much more similar to those who were sexually abused only than to those who were physically abused only (data not shown). Second, a body of prior research indicates that the psychosocial sequelae for children who are physically and sexually abused are more similar to those of children who are sexually abused only than they are to children who are physically abused only (Bryer, Nelson, Miller, & Krol, 1987; Chu & Dill, 1990; Dubner & Motta, 1999; Kamsner & McCabe, 2000; Ogata et al., 1990; Stein et al., 1996). Children whose caregivers reported no abuse acted as the reference group for the analysis.

As suggested by Hosmer and Lemeshow (2001) for logistic regression models with many independent variables and relatively small sample size, only those independent variables whose association with either physical or sexual abuse was statistically significant at $p = .20$ in the bivariate analyses were included in the multinomial model.

Power

Cohen power tables were used to estimate statistical power (Cohen, 1988). For the bivariate analyses, the minimum sample available for any given variable was 149, and this number was used for the power analyses. This study provided a β of .83 to test for small to medium effect sizes (.2–.3) at an α of .05. For the multinomial analysis of the association of demographic characteristics and presenting problems with abuse, this sample provided a β of .56 to test for small to medium effect sizes at an α of .05 ($df = 16$). For the multinomial analysis of the association of demographic and psychosocial characteristics with abuse, this sample provided a β of .63 to test for small to medium effect sizes at an α of .05 ($df = 12$).

Results

Descriptive results

Of the 156 children with autistic and Asperger's disorders, 69.2% ($n = 108$) of their caregivers reported no abuse, and 14.1% ($n = 22$) reported physical abuse only; 12.2% ($n = 19$) reported sexual abuse only and 4.4% ($n = 7$) reported physical and sexual abuse. For the purposes of the multinomial logistic regression, these last two categories comprised those in the "sexual abuse" category. Of the total sample, 69.2% ($n = 108$) were male, 70.5% ($n = 110$) were of European-American descent, and the average age of subjects was 11.6 years ($SD = 3.8$).

Bivariate results

Table 1 shows the bivariate associations between physical abuse and demographic characteristics, presenting problems and psychosocial characteristics. Children who experienced physical abuse were more likely than other children to present with sexual acting out or sexually assaultive behavior (OR = 8.6), and with academic problems (OR = 2.1). Children who were physically abused were also more likely to be sexually abusive towards others (OR = 10.8), to have attempted suicide (OR = 6.1), and to have run away from home (OR = 2.8). The association of physical abuse and conduct problems (OR = 2.4), previous psychiatric hospitalization (OR = 1.8), and older age (11.9 vs. 10.8 years) approached statistical significance.

Table 1
Binary logistic regression analyses predicting physical abuse

	History of physical abuse	No history of physical abuse	Odds ratio (95% confidence interval)
Demographics			
Male ($n = 156$)	78.0%	86.1%	.6 (.2–1.4)
European-American ($n = 149$)	68.4%	74.8%	.7 (.3–1.6)
Average age (*SD*) ($n = 156$)[a]	11.9 (3.8)	10.8 (4.0)	1.1 (1.0–1.2)
Presenting problem ($n = 151$)			
Self-injury	24.4%	16.4%	1.6 (.7–4.0)
Suicide-related problems	14.6%	10.9%	1.4 (.5–4.0)
Somatic problems	34.1%	25.5%	1.5 (.7–3.3)
Internalizing problems	48.8%	41.8%	1.3 (.6–2.7)
Hyperactive/attention problems	56.1%	50.0%	1.3 (.6–2.6)
Conduct problems[a]	82.9%	67.3%	2.4 (1.0–5.8)
Sexually acting out/sexual assault[a]	24.4%	3.6%	8.6 (2.5–29.1)
Social contact problems	48.8%	48.2%	1.0 (.5–2.1)
Academic problems[a]	43.9%	27.3%	2.1 (1.0–4.4)
Strange behavior	31.7%	25.5%	1.4 (.6–3.0)
Diagnosis ($n = 160$)			
Autistic disorder	9.8%	13.9%	Reference
Asperger's disorder	90.2%	86.1%	1.6 (.5–4.8)
Lifetime psychosocial characteristics			
Psychiatric hospitalization ($n = 154$)[a]	50.0%	36.0%	1.8 (.9–3.7)
Runaway from home ($n = 153$)[a]	34.2%	15.7%	2.8 (1.2–6.5)
Suicide attempt ($n = 152$)[a]	31.6%	7.0%	6.1 (2.3–16.5)
Substance use ($n = 153$)	10.0%	0%	1.1 (not calculable)
Sexual abusiveness ($n = 153$)[a]	28.2%	3.5%	10.8 (3.2–36.5)

[a] Variable significant at the $p \leq .20$ level and included in the multinomial logistic regression analysis.

Table 2 presents the bivariate associations between sexual abuse and demographic characteristics, presenting problems and psychosocial characteristics. Males were less likely to be sexually abused (OR = .3). Those with a history of sexual abuse were more likely to present with sexually acting out or assaultive behavior (OR = 8.6), suicide-related problems (OR = 5.1), and self-injurious behavior (OR = 2.8). They were also more likely to be sexually abusive (OR = 12.3), to have attempted suicide (OR = 6.9), to have run away from home (OR = 4.0), and to have had a previous psychiatric hospitalization (OR = 3.3).

Multinomial regression results

Table 3 presents the odds ratios and 95% confidence intervals estimating the relationship between demographic characteristics, presenting problems, and the presence of either physical or sexual abuse. The model includes those variables whose association with either physical or sexual abuse was significant at $p = .20$ (see Tables 1 and 2). Using this criterion, age, sex, self-injurious behavior, suicide-related behavior, conduct problems, sexually acting out, and academic problems were entered into the model. The final model, which included 149 cases, demonstrated acceptable model fit ($\chi^2(16) = 70.4$, $p < .001$),

Table 2
Binary logistic regression analyses predicting sexual abuse

	History of sexual abuse	No history of sexual abuse	Odds ratio (95% confidence interval)
Demographics			
Male (n = 156)[a]	69.2%	86.9%	.3 (.1–.9)
European-American (n = 149)	64.0%	75.0%	.6 (.2–1.5)
Age (n = 156) (SD)	11.9 (4.3)	10.9 (3.9)	1.1 (1.0–1.2)
Presenting problem (n = 151)			
Self-injury[a]	30.8%	16.0%	2.3 (.9–6.1)
Suicide-related problems[a]	30.8%	8.0%	5.1 (1.8–14.7)
Somatic problems	30.8%	27.2%	1.2 (.5–3.0)
Internalizing problems	46.2%	43.2%	1.1 (.5–2.6)
Hyperactive/attention problems	53.8%	51.2%	1.1 (.5–2.6)
Conduct problems	80.8%	69.6%	1.8 (.6–5.2)
Sexually acting out/sexual assault[a]	34.6%	4.0%	12.7 (3.8–42.4)
Social contact problems	42.3%	49.6%	.8 (.3–1.8)
Academic problems	43.9%	27.3%	1.7 (.7–4.2)
Strange behavior	23.1%	28.0%	.8 (.3–2.1)
Diagnosis (n = 157)[a]			
Autistic disorder	7.7%	13.8%	Reference
Asperger's	86.2%	92.3%	1.9 (.4–8.9)
Lifetime psychosocial characteristics			
Psychiatric hospitalization (n = 154)[a]	64.0%	34.9%	3.3 (1.4–8.1)
Runaway from home (n = 153)[a]	43.5%	16.2%	4.0 (1.6–10.3)
Suicide attempt (n = 152)[a]	39.1%	8.5%	6.9 (2.4–19.5)
Substance use (n = 153)	16.0%	.0%	1.2 (.0–could not calculate)
Sexual abusiveness (n = 153)[a]	37.5%	4.7%	12.3 (3.8–39.4)

[a] Variable significant at the $p \leq .20$ level and included in the multinomial logistic regression analysis.

Table 3
Multinomial logistic regression of presenting problem and demographics predicting abuse (n = 128)

Relative risk ratios compare each abuse group to children who were not abused	Sexual abuse		Physical abuse	
	RRR	95% CI	RRR	95% CI
Demographics				
Male	.3	.0–1.0	.6	.2–2.4
Age (years)	1.0	.9–1.2	1.1	.9–1.2
Presenting problem				
Self-injury	.9	.2–3.7	.6	.2–2.3
Suicide-related problems	3.5	.9–13.8	.9	.2–4.6
Conduct problems	1.8	.5–6.7	2.7	.8–9.1
Sexually acting out/sexual assault	10.1	1.8–56.4	2.7	.4–18.4
Academic problems	.6	.2–2.3	1.1	.4–3.1

Table 4

Multinomial logistic regression of psychosocial characteristics and demographics predicting abuse ($n = 128$)

Relative risk ratios compare each abuse group to children who were not abused	Sexual abuse		Physical abuse	
	RRR	95% CI	RRR	95% CI
Demographics				
Male	.3	.1–1.0	.6	.2–2.2
Age (years)	1.0	.9–1.2	1.0	.9–1.2
Lifetime psychosocial characteristics				
Psychiatric hospitalization	1.9	.6–5.9	.3	.1–1.3
Runaway from home	5.4	1.7–17.4	.8	.3–2.2
Suicide attempt	4.4	1.1–17.2	2.7	.6–11.1
Being sexually abusive towards others	10.6	2.4–47.2	2.1	.3–13.4

and accounted for 14.4% of the variance in the dependent variable (Cox and Snell, $R^2 = .144$). Only sexually acting out remained significant at $p = .05$ in predicting sexual abuse (OR = 10.1); suicide-related problems approached statistical significance (OR = 3.5). No presenting problems remained statistically significant in predicting physical abuse.

Table 4 presents the relative risk ratios and 95% confidence intervals estimating the relationship between demographic, psychosocial characteristics, and the presence of either physical or sexual abuse. The model includes those variables whose association with either physical or sexual abuse was significant at $p = .20$ (see Tables 1 and 2). Using this criterion, age, sex, having had a previous psychiatric hospitalization, having run away from home, having made a suicide attempt, and being sexually abusive towards others were entered into the model. The final model, which included 151 cases, demonstrated acceptable model fit ($\chi^2(12) = 40.5$, $p < .001$), and accounted for 23.5% of the variance in the dependent variable (Cox and Snell $R^2 = .235$). Being sexually abusive towards others (OR = 10.6), running away from home (OR = 5.4) and having made a suicide attempt (OR = 4.4) remained statistically significant at $p = .05$ in predicting sexual abuse. No presenting problems remained statistically significant in predicting physical abuse.

Discussion

The results of this study suggest that, among children with autistic and Asperger's disorder treated in community mental health settings, almost one in five had experienced physical abuse and one in six had experienced sexual abuse. While these rates are lower than those previously reported among institutionalized samples of children with disabilities (Ammerman et al., 1994, 1989), they are not much lower than reported rates among children in community mental health care (Walrath et al., 2003), and are much higher than those reported among children with autism served through the special education system (Sullivan & Knutson, 2000).

While a number of presenting problems and psychosocial characteristics were more prevalent among children with autism who had been either physically or sexually abused than among those who had not, fewer variables of interest maintained their association with abuse in the multinomial model. Children

who were sexually abused were much more likely than other children to engage in sexually acting out behavior or to be sexually abusive towards others; they were also more likely to have run away from home or to have made a suicide attempt. These findings are consistent with research on typically developing children, which has found that abused children are more likely to engage in suicidal (Evans, Hawton, & Rodham, 2005), delinquent and sexualized behaviors (English, 1998; Nurcombe, 2000). The other two studies of individuals with developmental disabilities have found that behaviors associated with sexual abuse are similar to those of typically developing individuals, although they focused on adults rather than children (Sequeira & Hollins, 2003; Sequeira, Howlin, & Hollins, 2003).

Limitations

A number of study limitations should be considered. First, since these data were collected as part of a service evaluation initiative, diagnoses were not determined using standardized instruments. Several studies, however, have found good to excellent reliability associated with both the diagnosis of autistic spectrum disorders and the differentiation of subtypes (Eisenmajer et al., 1996; Fombonne et al., 2004; Hill et al., 2001; Mahoney et al., 1998). A related limitation is that these data were not collected specifically to examine issues related to abuse, and, therefore, numerous variables known to be associated with abuse were not available for analysis. A third limitation is that data were based on caregivers' reports. Problems with recall and stigma associated with revealing a history of abuse and other psychosocial characteristics may have influenced responses; however, Finkelhor and Moore (1997) suggest the potential utility of using caregiver report, even for an issue as sensitive as child sexual abuse. They found that 5.7% of parents report that their children had a lifetime history of sexual abuse; our finding of three times that proportion in this study sample is consistent with previous research on children with disabilities (Crosse et al., 1993; Sobsey & Mansell, 1994). There are no available data, however, on the validity of caregiver report with regard to physical abuse. Fourth, the colinearity among different presenting problems may have obscured the multivariate relationships with abuse, and the relatively small sample size precluded having the power to test some associations and interactions between independent variables. The fact that certain associations remained significant in the underpowered multinomial models suggests the robustness of these findings. Finally, the children in this study sample were referred into comprehensive community mental health services. To our knowledge, no published information is available on how their characteristics may differ from the general population of children with autistic spectrum disorders.

Implications

Despite these limitations, these findings have important implications for treatment, service delivery and future research. Perhaps one of the most important implications relates to the fact that, because there is consensus that the etiology of ASD is primarily biological and not as influenced by psychosocial environment as some other disorders (Filipek et al., 2000; Folstein & Rosen-Sheidley, 2001; Volkmar, Lord, Bailey, Schultz, & Klin, 2004), clinicians may be less likely to assess environmental characteristics of children with ASD. The results of this study suggest that clinicians should be as attuned to the psychosocial histories of children with ASD as they are for other children, especially since most research in this area suggests that children with disabilities who are abused are as or more likely that other children to experience the negative consequences of abuse (Mansell, Sobsey, & Moskal, 1998; Sequeira et al., 2003;

Sequeira & Hollins, 2003). More specific implications that may relate either to physical abuse or sexual abuse are discussed separately below.

Physical abuse

There are a number of possible interpretations of the findings related to physical abuse. It is possible that parents of children with ASD may attempt to control behaviors through physically abusive means. Ammerman et al. (1994) found evidence for this hypothesis in their study of psychiatrically hospitalized children with developmental disabilities, in which behaviors perceived by parents as acting out or rebellious were highly correlated with abuse. It is also possible that the observed presenting problems are a manifestation of physical abuse. One could also hypothesize a transactional model of behaviors and abuse, in which parents respond to children's problem behaviors in a way that does not cause the child to modify the behavior in the way the parent wishes. Patterson and Garwick (1994), among others, have posited this type of model in which child health, family functioning, and adaptation continually affect each other. An important implication of this hypothesis is that early identification of children with ASD and related parent education may reduce the risk of abuse. In their review of the literature in this area, Campbell and Patterson (1995) cite the effectiveness of family interventions in improving family functioning, and consequently the health of children with chronic conditions such as autism. Westcott and Cross (1996), however, have pointed out the limitations and dangers of only focusing on parent and child behaviors, and advocate for considering the social context in which the abuse takes place. Future research should incorporate meaningful data on these other contextual factors when examining the causes and consequences of abuse among children with disabilities.

Sexual abuse

The study results provide important indication that sexually acting out and assaultive behavior, running away from home, and suicidal behavior in children with autism are important warning signs that children may have been sexually abused. The association between these behaviors and sexual abuse persisted even after controlling for demographic characteristics and all other presenting problems. In the presence of these behaviors, clinicians should probe for the possible presence of sexual abuse (Howlin & Clements, 1995).

The relatively high prevalence of sexual abuse among children with autism suggests the need to develop ways to communicate with this group about their own and others sexuality and sexually appropriate behavior. Research suggests that individuals with autism have knowledge of (Lunsky & Konstantareas, 1998; Ousley & Mesibov, 1991) and engage in sexual behavior (Konstantareas & Lunsky, 1997; Van Bourgondien, Reichle, & Palmer, 1997). While concerns about this behavior have been documented, more research is required on successful methods for communicating related information (Koller, 2000).

This study adds to a small body of literature documenting differences in the behaviors of individuals with developmental disabilities who are abused compared with those who are not abused. The results suggest that, in a community sample presenting for mental health treatment, abuse is relatively prevalent, and there are specific behaviors that appear to indicate increased risk.

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Résumé

French-language abstract not available at time of publication.

Resumen

Spanish-language abstract not available at time of publication.