

## Victimization of Children With Disabilities

Irit Hershkowitz, PhD  
University of Haifa

Michael E. Lamb, PhD  
University of Cambridge

Dvora Horowitz, PhD  
Israeli Ministry of Labour and Social Affairs

Children with disabilities (CWDs) are more likely to be victims of child abuse but may have more difficulty than their typically developing (TD) peers reporting their experiences. In this study, the authors examined the characteristics of abuse reported by CWDs based on forensic statements made by 40430 alleged abuse victims, 11% categorized as children with minor disabilities, and 1.2% categorized as children with severe disabilities. Proportionally more of the CWDs than of the TD children were allegedly victims of sexual rather than physical abuse. CWDs failed to disclose abuse and delayed disclosure more often than TD suspected victims. CWDs were more likely than TD children to be abused by parent figures and to experience physical abuse resulting in body injury or serious sexual offenses, including those involving penetration, repeated abuse, use of force, and threats. Higher levels of disability were associated with increased risk of sexual abuse. Both the heightened incidence of severe abuse among and the failure to disclose abuse by CWDs should be sources of considerable concern to social welfare and criminal justice agencies.

*Keywords:* child abuse, disclosure, disability

Children with mental (including communicative and learning) disabilities are as much as two to three times more likely to be victims of child abuse than typically developing (TD) children (Little, 2004). These disabilities may also limit the children's ability to provide forensically relevant information about the abuse to investigative agencies, such as social welfare services and the police. Recent international research has focused on the memory and communicative capacities of children with disabilities (CWD), but little is known about the characteristics of those who are believed to have been abused. Large data sets are particularly useful when examining such characteristics and the purposes of this study were to examine the degree to which children with disabilities (CWDs) were at an increased risk of specific forms of abuse, their likelihood to disclose abuse when questioned, and the characteristics of abuse reported in a large dataset comprising all reported instances of physical and sexual abuse investigated in the state of Israel over a 7-year period from 1997 to 2004.

### Previous Research

In a review of more than 20 studies exploring the association between maltreatment and disabilities, Westcott (1991) reported mixed support for the hypothesis that children with mental dis-

abilities are at increased risk of maltreatment. For example, Benedict, White, Wulff, and Hall (1990) reported that children with severe disabilities were less likely to be maltreated than children with less severe disabilities whereas Kirkham and associates (e.g., Kirkham et al., 1986; Schilling, Kirkham, & Schinke, 1986; Schilling, Schinke, & Kirkham, 1985) found that the children who were less skilled cognitively were most likely to be abused.

Subsequent large scale studies have provided strong evidence for the association between maltreatment and the severity of disability (Westcott & Jones, 1999). For example, using data from Child Protective Services (CPS), Crosse, Kaye, and Ratnofsky (1993) found that intrafamilial maltreatment was 1.7 times more frequent among CWDs than among TD children (relative risks were 1.6, 1.8, and 2.1 for physical/emotional neglect, sexual abuse, and physical abuse, respectively). The association differed depending on the children's ages and gender: boys with disabilities who were over 4 years of age were at especially high risk. Parents or primary caretakers were less likely to be the suspected perpetrators of maltreatment if children had disabilities than if they did not.

Similarly, using 10 years of records from a hospital in Nebraska, a study by Sullivan and Knutson (1998) found that children with various disabilities (including behavior disorders, sensory impairment, health impairment, and mental retardation) were 1.8 times more likely to be neglected, 1.6 times more likely to be physically abused, and 2.2 times more likely to be sexually abused than children without such disabilities. They also reported that some victims of maltreatment were more likely to have psychological problems such as conduct disorders, suggesting that the association might be bidirectional. In a later study of nonclinical populations from the same community, Sullivan and Knutson (2000) found a strong association between disability and maltreatment: CWDs were 3.4 times more likely to be maltreated than TD children (31%

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Irit Hershkowitz, PhD, University of Haifa, Haifa, Israel; Michael E. Lamb, PhD, University of Cambridge, Cambridge, United Kingdom; Dvora Horowitz, PhD, Israeli Ministry of Labour and Social Affairs, Jerusalem, Israel.

For reprints and correspondence: Irit Hershkowitz, School of Social Work, University of Haifa, Haifa, Israel 31905. E-mail: irith@research.haifa.ac.il

vs. 9%; the corresponding risks for physical, sexual, and emotional abuse were 3.8, 3.1, and 3.8, respectively). Congruent with the findings of Crosse and colleagues (1993), boys with disabilities were more likely than girls to be maltreated in both of Sullivan and Knutson's studies. Younger CWDs were at greater risk than older CWDs. Preschoolers were victims of physical and sexual abuse as well as other forms of maltreatment more often than older children, and family members were the most common perpetrators regardless of disability.

After reviewing the relevant literature, Milne (1999) concluded that CWDs were especially vulnerable because of their extended dependence on caregivers (including multiple caregivers in residential care settings) for helping meet their physical, social, and emotional needs, lack of control over their own lives, tendencies to obey and seek approval from others, lack of knowledge and understanding about sex, isolation and rejection by others, and inadequate social and communicative skills that limit their ability both to avoid victimization and to disclose it when it occurs.

People with mental disabilities seldom report their experiences to the police. Murphy (2001) estimated that only one in five disabled victims make a formal complaint to the police, and Clare (2001) reported that the treatment of those complaints is often cursory and incomplete, with police investigations limited and prosecutions rare. Historically, disabled people have been regarded as unreliable witnesses (Gudjonsson, 2003) because of their poor memories, their susceptibility to suggestion, and their limited descriptive capacities (Perlman, Ericson, Esses, & Isaacs, 1994). Disabled people have difficulty providing testimony when interviewed (Milne & Bull, 2001) often becoming confused and uncomfortable, especially when asked suggestive or complex questions (Kebbell, Hatton, Johnson & O'Kelly, 2001). According to Milne and Bull (2001), judges often fail to intervene and protect disabled adults who are intimidated in court. Similarly, researchers have shown that CWDs are often discredited in the forensic process and experience inappropriate questioning (Milne & Bull, 2001; Dent, 1986; Butterfield & Feretti, 1987; Milne, 1999).

In Israel, over 5000 allegations of abuse are investigated each year. Of 40430 investigations between 1998 and 2004, 15879 involved allegations of sexual abuse and 24551 of physical abuse. Although more than 88% of the alleged victims were deemed to be developing normally, 11% were described as children with minor disabilities and 1.2% as children with severe disabilities. Consequently although the proportion of CWDs is relatively small, the number is sufficiently large to enable more fine-grained analyses of factors that affect the association between disability and abuse.

### The Present Study

This study extends previous reports on the maltreatment of CWDs by focusing more closely on the types and characteristics of reported offenses and the extent to which CWDs disclose details of their suspected victimization. We also focused not merely on differences between children with and without disabilities but also on differences between children with more and less serious disabilities. Specifically, we asked:

- (1) Are alleged abuse victims with disabilities more or less likely than alleged victims without disabilities to be suspected victims of sexual as opposed to physical abuse, and does this vary depending on age and gender?

- (2) To what extent do CWDs and TD children disclose abuse or delay doing so?
- (3) Do the associations between the severity of reported abuse and the identity of the suspected abusers differ when the alleged victims are CWDs as opposed to TD children?
- (4) Does the level of disability affect children's understanding of the (sexual) crimes of which they may have been victims?

In addressing each of these questions, we compared children with severe disabilities, children with minor disabilities, and TD children in order to determine whether the degree of disability was associated with variations in the behavior of CWDs who were suspected victims of child abuse. We hypothesized that compared to TD children, CWDs would be:

- (1) More likely to report sexual rather than physical abuse.
- (2) Less likely to disclose abuse and more likely to delay disclosure.
- (3) More likely to report more serious crimes, especially crimes perpetrated by close figures.
- (4) Less likely to understand sexually abusive incidents.

In general, level of disability was expected to be positively associated with the extent to which these patterns were evident.

### Method

All the children examined in the current study were formally interviewed using the NICHD (National Institute of Child Health and Human Development) Investigative Interview Protocol (Lamb, Orbach, Hershkowitz, Esplin, & Horowitz, in press), which facilitates developmentally appropriate questioning and enhances the quality of information provided by young victims, witnesses, and suspects of child abuse (Hershkowitz, Horowitz, Lamb, Orbach, & Sternberg, 2004; Lamb et al., 2003, in press; Orbach et al., 2000; Sternberg, Lamb, Orbach, Esplin, & Mitchell, 2001). Because protocol-guided interviews take into account the limited cognitive abilities of young informants (shorter attention spans, limited linguistic skills, partial mastery of concepts and poorer memory retrieval skills), the protocol should also enhance the quality of interviews with CWDs. Together, the children studied here comprise the largest and most representative sample of allegedly abused CWDs studied to date.

The data set comprised reports of all forensic investigations involving 3- to 14-year-old alleged victims of sexual and physical abuse interviewed in Israel between 1998 to 2004. A total of 40430 children were involved. The children were referred for investigation following a complaint made to the police or following suspicions reported to the CPS. All the children were interviewed using the 1998 version of the NICHD protocol described by Orbach et al. (2000). A total of 155 experienced and trained youth investigators conducted all the investigative interviews, as required by law (Sternberg, Lamb, & Hershkowitz, 1996). These youth investiga-

tors had degrees in social work and were employed by the Israeli Ministry of Labor and Welfare as the only professionals authorized to conduct forensic interviews with children under 14 years of age.

Following the investigations, the children were routinely identified as children with or without disabilities primarily on the basis of formal or informal assessments made in the educational, health, or welfare systems. These identifications were based on information regarding their living arrangements, school or class assignments, psychosocial reports, and documented diagnoses made by health (including mental health), educational, or welfare agencies. The disabilities identified by the youth investigators were of the types discussed by Kendal-Tackett, Lyon, Taliaferro, and Little (2005): emotional and behavioral disorders, pervasive development disorders, mental retardation, brain injuries, communication and learning disorders, physical impairments or other health related disabilities, sensory impairments, and multiple disabilities.

Disabilities were categorized as minor or severe based on the investigators' assessment of the children's functioning during the forensic process. Children with minor disabilities usually had difficulty participating in the investigations, often because of their diminished cognitive, behavioral, or communicative skills. Physical impairments and health related disabilities sometimes limited participation in investigations, too, but usually had a modest impact on the interview process and were therefore often described as minor disabilities. Children with severe disabilities usually had extreme difficulty responding to the demands of the interview. They posed special challenges for investigators and sometimes the assistance of other professionals or care providers was needed. Table 1 shows how disabilities were categorized by the youth investigators.

In addition to an assessment of degree of disability, the investigators also provided information about the children's characteristics (age, gender, family background) as well as details about the alleged offenses, the identity of the suspected perpetrators, their relationship to the victims, when the suspected abuse was believed to have begun, how frequent it had been, when and how it came to be suspected, whether any injuries were apparent or had been identified in medical examinations, and how well the children appeared to understand what had happened to them.

### *The NICHD Protocol*

The NICHD protocol guides interviewers in detail through all phases of the investigative interview. In the introductory phase, the interviewer introduces him/herself, clarifies the child's task, and explains the ground rules and expectations. The rapport building phase that follows comprises two sections. This phase is designed to create a relaxed, supportive environment for children and to establish rapport between the child and the interviewer. In the second phase, children are prompted to describe at least one neutral experienced event in detail so that the child understands his or her role as an invaluable informant and can become familiar with the open-ended investigative strategies and techniques used to explore the alleged abuse.

The next phase provides a transition between the presubstantive and substantive parts of the interview, and involves a series of prompts, progressing if necessary from open to focused, designed to identify the target event/s to be investigated. The free recall phase follows as soon as the child mentions an incident that might be considered abusive. It begins with the main invitation ("Tell me everything that happened, from the beginning to the end, as best you can remember"). Follow-up open-ended prompts and paired invitations are then used to elicit details about the alleged incident/s from free recall memory. Only after the open-ended questioning has been exhausted do interviewers move to focused questions. Suggestive utterances, which communicate what response is expected, are avoided throughout the interview.

After the alleged incident has been thoroughly investigated, children are asked to describe the disclosure process. They are encouraged, using open-ended prompts (e.g., "And then what happened?"), to continue telling what had happened since the end of the event. If the children do not describe the whole disclosure process in detail, they are prompted with additional questions designed to determine how other people came to know about the event.

## Results

### *Vulnerability to Sexual and Physical Abuse*

Of 40430 alleged abuse victims, 4461 (11%) children were categorized as children with minor disabilities and 476 (1.2%)

Table 1  
*Categorization of Disabilities*

Categories of disabilities	Types of disabilities deemed minor	Types of disabilities deemed severe
Emotional and behavioral disorders	Severe emotional problems Behavioral disorders	Mental illness such as childhood schizophrenia Severe behavioral disorders
Pervasive development disorders	Asperger's Syndrome	Autism
Mental retardation	Developmental delay	Mild to severe mental retardation
Brain injury, communication and learning disorders	Learning disorders	Severe learning disorders
Physical impairment and health related problems	Speech and language disorders Physical conditions and health problems affecting the interview process	Severe speech and language disorders Severe physical conditions and health problems, greatly affecting the process of interview
Sensory impairment	Hearing impairments Visual impairments	Deafness Blindness
Multiple disability	Two or more of the above	Two or more of the above

Table 2  
Factors Associated With Suspicions of Sexual Abuse Involving Children With Different Levels of Disability

	Non-disabled (%)	Children with minor disabilities (%)	Children with severe disabilities (%)
Age			
3-6	1355 (13.7)	112 (10.0)	8 (6.3)
7-10	4006 (40.4)	450 (40.2)	52 (40.9)
11-14	4544 (45.9)	557 (49.8)	67 (52.8)
Gender			
Male	2908 (29.3)	499 (44.6)	49 (38.6)
Female	7007 (70.7)	621 (55.4)	78 (61.4)
Suspect			
Parent	719 (7.3)	111 (9.9)	26 (21.0)
Non-parent	9179 (92.7)	1008 (90.1)	98 (79.0)
Disclosure			
Yes	9915 (72.3)	1120 (61.4)	127 (54.0)
No	3796 (27.7)	705 (38.6)	108 (46.0)
Delayed disclosure			
Yes	4156 (52.1)	606 (67.9)	63 (70.0)
No	3822 (47.9)	287 (32.1)	27 (30.0)

Note. All percentages reflect proportions within the category (columns).

children were categorized as children with severe disabilities. Tables 2 and 3 display characteristics of the cases involving suspected sexual abuse, whereas Table 4 provides information about physical abuse. In comparison to TD children, children with minor disabilities were somewhat overrepresented in the category of suspected sexual abuse victims (41.1% vs. 38.7%) and children with severe disabilities were substantially overrepresented, 49.8%;

Table 3  
Characteristics of Suspected Sexual Abuse Associated With Degree of Disability

	Non-disabled children (%)	Children with minor disabilities (%)	Children with severe disabilities (%)
Sexual abuse			
Exposure	1854 (19.1)	94 (8.6)	8 (6.6)
Touch	6339 (65.4)	724 (66.5)	83 (68.6)
Penetration	1494 (15.4)	271 (24.9)	30 (24.8)
Grooming			
Yes	3841 (39.3)	349 (31.8)	37 (29.8)
No	5927 (60.7)	747 (68.2)	87 (70.2)
Threats			
Yes	478 (11.5)	89 (14.7)	4 (6.3)
No	3679 (88.5)	517 (85.3)	59 (93.7)
Coercion			
Yes	2894 (29.2)	407 (36.3)	51 (40.2)
No	7021 (70.8)	713 (63.7)	76 (59.8)
Repeated abuse			
Yes	3808 (38.4)	569 (50.8)	62 (48.8)
No	6110 (61.6)	551 (49.2)	65 (51.2)
Understanding			
Yes	6726 (67.8)	797 (71.2)	81 (63.8)
No	3189 (32.2)	323 (28.8)	46 (36.2)

Note. All percentages reflect proportions within the categories (columns).

Table 4  
Variations in Rates and Severity of Suspected Physical Abuse Associated With Degree of Disability

	Non-disabled children (%)	Children with minor disabilities (%)	Children with severe disabilities (%)
Age			
3-6	2495 (18.8)	296 (20.3)	17 (15.7)
7-10	6295 (47.4)	748 (51.3)	56 (51.9)
11-14	4481 (33.8)	415 (28.4)	35 (32.4)
Gender			
Male	7437 (56.0)	978 (67.0)	76 (70.4)
Female	5844 (44.0)	481 (33.0)	32 (29.6)
Suspect			
Parent	12023 (90.9)	1298 (89.4)	90 (84.9)
Non-parent	1200 (9.1)	154 (10.6)	16 (15.1)
Disclosure			
Yes	13,281 (61.2)	1459 (55.6)	108 (45.6)
No	8430 (38.8)	1165 (44.4)	129 (54.4)
Delayed disclosure			
Yes	10850 (89.9)	1158 (89.1)	82 (85.4)
No	1223 (10.1)	141 (10.9)	14 (14.6)
Injury			
No injury	7581 (57.1)	745 (51.1)	45 (41.7)
Injury	4831 (36.4)	603 (41.3)	52 (48.1)
Serious injury	869 (6.5)	111 (7.6)	11 (10.2)

Note. All percentages reflect proportions within the categories (columns).

$\chi^2(2) = 32.23, p < .0001$ , in this group. With respect to physical abuse, children with minor disabilities were somewhat underrepresented (58.9% vs. 61.3%), and children with severe disabilities were more markedly underrepresented (50.2%).

With respect to both types of abuse, boys with minor and severe disabilities were overrepresented in comparison with TD boys, while girls with disabilities were underrepresented in comparison with TD girls, sexual abuse: 42.4% and 36.7% vs. 30.2% for boys, and 57.6% and 63.3% vs. 69.8% for girls;  $\chi^2(2) = 112.28; p < .0001$ ; physical abuse: 67.8% and 66.1% vs. 56.1% for boys, and 32.2% and 33.9% vs. 43.9% for girls;  $\chi^2(2) = 137.37; p < .0001$ .

When children were grouped into three age categories (3 to 6, 7 to 10, and 11 to 14 years), no age differences were evident in the association between disability and abuse. However, children with both minor and severe disabilities between 3 and 6 years of age were more likely to be suspected victims of physical abuse than TD children of the same ages (27.9% and 25.1% vs. 23.4%) while adolescents between 11 and 14 years with both minor and severe disabilities were less likely to be the suspected victims of physical abuse, 25.1% and 29.3% vs. 31.2%;  $\chi^2(4) = 49.32; p < .0001$ , than TD children of the same ages. Log-linear analysis confirmed these interactions between disability, gender, and age on the relative likelihood that sexual as opposed to physical abuse would be suspected,  $\chi^2(12) = 108.986, p < .0001$ .

#### Failures to Disclose Abuse and Delayed Disclosure

When interviewed, TD children failed to disclose abuse 34.5% of the time 27.7% of the times when sexual abuse was suspected and 38.8% of the times that physical abuse was suspected. Children with minor and severe disabilities failed to disclose abuse

much more often than TD children; 38.6% and 46%, respectively, for sexual abuse;  $\chi^2(2) = 125.56, p < .0001$ , and 44.4% and 54.4%, respectively, for physical abuse;  $\chi^2(2) = 52.45, p < .0001$ . This pattern was also evident when differences associated with age and gender were taken into account, log-linear:  $\chi^2(42) = 3392.645, p < .0001$ . CWDs failed to disclose abuse more often than TD children regardless of age and gender.

Of the children who disclosed abuse ( $n = 26132$ ), children with both minor and severe disabilities were more likely to delay disclosure for at least one month after the incident/ last incident (80.5% and 78%) than were TD children, 74.8%;  $\chi^2(2) = 34.78, p < .0001$ . This pattern was especially strong when sexual abuse was suspected: CWDs in both groups delayed disclosure significantly more often (67.9% and 70%, respectively) than TD children did (52.1%) when sexual abuse was suspected,  $\chi^2(2) = 89.89, p < .0001$ . There was no comparable difference when physical abuse was suspected.

Log-linear analysis confirmed that, in addition to the type of abuse, age, and gender affected the association between disability and delay of disclosure,  $\chi^2(42) = 1824.525, p < .0001$ . Specifically, the association was significant for girls, but not for boys, and for the oldest (11- to 14-year-olds) but not for the youngest (3- to 6-year-olds) children. Girls with minor and severe disabilities delayed the disclosure of abuse more often than TD girls. Eleven- to 14-year-old children with minor and severe disabilities delayed more often than TD children of the same ages.

### Severity of Abuse

Compared to TD victims of sexual abuse, the children with minor and severe disabilities alleged significantly more serious offenses,  $\chi^2(4) = 127.66; p < .0001$ , including skin to skin touch (66.5% and 68.6% vs. 65.4%; see Table 2) or penetration (24.9% and 24.8% vs. 15.4%) and fewer minor offenses such as sexual exposure (8.8% and 6.6% vs. 19.1%). Log-linear analysis revealed that the association between the type of sexual offense and disability was evident for both boys and girls, but differed depending on the children's ages,  $\chi^2(18) = 118.53, p < .0001$ . Specifically, older (7- to 10- and 11- to 14-year-olds) but not the youngest (3- to 6-year-old) CWDs were more likely to allege more serious offenses than were TD children.

CWDs in both the minor and severe disabilities groups were more likely to report being repeatedly abused sexually (50.8% and 48.8%) than TD children, 38.4%;  $\chi^2(2) = 69.31; p < .0001$ , regardless of gender and age. Those with minor disabilities were also more likely to report having been threatened than TD children, 14.7% vs. 11.5%;  $\chi^2(2) = 6.99; p < .03$ . In addition, CWDs in both groups were less likely to report having been "groomed" than TD children, 29.7% and 31.7% vs. 39.1%;  $\chi^2(2) = 27.44; p < .0001$ , although log-linear analyses revealed gender and age differences in these associations. More girls with disabilities and more disabled children between 11 and 14 years reported threats,  $\chi^2(12) = 94.705, p < .0001$ , while fewer boys with disabilities and fewer disabled children of between 11 and 14 years reported grooming,  $\chi^2(12) = 110.559, p < .0001$ . Children with both minor and severe disabilities were more likely to report being maltreated forcefully, 36.3% and 40.2% vs. 29.2%;  $\chi^2(2) = 30.76; p < .0001$ , although this association was only significant for girls and for children of between 7 and 14 years of age, log-linear:  $\chi^2(12) = 94.309; p <$

.0001. Girls and older children with disabilities reported the use of force by suspects more often than did their TD counterparts.

Relative to TD children, children with both minor and severe disabilities were significantly more likely to identify sexual perpetrators who were their own parents or parent figures (9.9% and 21%) rather than other persons, 7.3%;  $\chi^2(2) = 41.19; p < .0001$ . This association was significant regardless of the children's gender and age.

CWDs in both groups also alleged significantly more serious physical abuse than TD children, resulting in more cases of body injury and more cases of serious injury than when the alleged victims did not have disabilities, 41.3% and 48.1% vs. 36.4% for body injury and 7.6% and 10.2% vs. 6.5% for serious injury;  $\chi^2(4) = 29.29; p < .0001$ ; see Table 3. Log-linear analysis revealed that this association was significant for boys and for children of between 3 and 10 years but not significant for girls and older children,  $\chi^2(18) = 37.763, p < .004$ .

### Understanding Sexual Abuse

According to the investigators' reports, children with severe disabilities failed to understand the suspects' motives and the nature of the reported sexual interactions more often than TD children, 36.2% vs. 32.2%;  $\chi^2(2) = 6.237; p < .0001$ , although children with minor disabilities failed to understand the circumstances less frequently (28.8%) than TD children. Log-linear analysis,  $\chi^2(12) = 97.555, p < .0001$ , revealed that this association was significant only for girls and for children from the two older age groups (7-10- and 11- to 14-year-olds).

### Discussion

The results reported here extend previous reports on the maltreatment of CWDs by examining the characteristics of reported offenses and the extent to which CWDs disclosed information about their alleged victimization. Among alleged abuse victims, the distribution of CWDs into victims of sexual and physical abuse differed from that of TD informants. CWDs of all ages tended to be overrepresented among suspected victims of sexual abuse and underrepresented (especially when the older children were concerned) among victims of physical abuse. Our findings also suggest that alleged victims with disabilities may suffer more severe forms of sexual abuse than TD children. Specifically, they were more likely to report being repeatedly victimized, victims of more intrusive abuse, and victims of more incidents involving the use of threats and force than were TD children. Taken as a whole, these findings suggest that CWDs may be used as "safe targets" for sexual abuse because they are less able to avoid or report victimization (Williams, 1995).

On most dimensions, higher levels of disability were associated with increased risks of sexual abuse. Whereas the risks for children with minor disabilities were higher than for TD children, the risks for children with severe disabilities were even higher with respect to the number of incidents reportedly experienced, the severity of the reported sexual acts, the use of force, and the tendency for physical injuries to be inflicted during the abusive incidents. The increased vulnerability of more severely disabled children has not previously been documented, and should be a source of considerable concern to social welfare and criminal justice agencies.

Compared to TD suspected victims, alleged victims with disabilities disclosed abuse less frequently and delayed disclosure more often. Again, children with severe disabilities failed to disclose abuse more frequently and tended to delay disclosure even more often than peers with minor disabilities. The differentially lower rates of disclosure by CWDs may be related to other findings: children with minor disabilities reported being threatened more often than TD children while children with severe disabilities seemed to have more difficulty understanding the sexual incidents under investigation. Difficulties in understanding sexual interactions have been reported previously (Oosterhoorn & Kendrick, 2001) and may be compounded by cognitive, communicative, and emotional factors that impede the children's ability to describe experiences of abuse in a comprehensible way. A higher probability of failure to disclose abuse when interviewed may increase the likelihood that CWDs will continue to be abused.

The alleged perpetrators in our study were more often found to be parents or parental figures when suspected victims were CWDs rather than TD children. Suspected victims tend to conceal abuse perpetrated by their parents much more often than they conceal abuse by other perpetrators (Hershkovitz, Horowitz, & Lamb, 2005; London, Bruck, Ceci, & Shuman, 2005). Thus, CWDs may delay or avoid disclosing abuse because they are more likely to be dependent psychologically and physically on their abusers. The children with severe disabilities may be especially vulnerable to abuse by their parents; in our study they were suspected of being victimized by their parents almost three times more often than were TD children.

Higher rates of nonallegation may also occur because unwarranted suspicions are more likely to arise where CWDs, as opposed to TD children, are involved. An unknown proportion of suspected victims were not actually abused (London et al., 2005; Lyon et al., 2001, 2007), and it is possible that unwarranted suspicions are more likely to be investigated when the suspected victims have disabilities.

As in previous studies (Kvam, 2000), disabled boys appeared to be at greater risk than disabled girls for both sexual and physical abuse, perhaps because boys are more likely than girls to have disabilities. This trend was stronger for children with minor disabilities than for children with severe disabilities, and for children aged 7 to 10 years rather than for older or younger children.

Although we did not compare abused and nonabused CWDs, we did compare the characteristics of CWDs and TD children who were alleged victims of abuse. Our results suggest that developmental differences were only evident with respect to physical abuse; allegedly abused children of all ages were more likely to report sexual abuse than physical abuse, but physical abuse was more likely to be suspected when the alleged victims were in the youngest (preschool) group.

### *Limitations*

The extent to which CWDs in other countries are victimized to the same degree and in the same ways as Israeli CWDs is unknown (Kvam, 2000). However, the generalizability of our findings is enhanced by the fact that we examined records concerning all reported incidents of maltreatment involving 3- to 14-year-olds throughout an entire country over a 7-year period. Nonetheless, the sample only included alleged victims identified by the police or CPS and not all victims of abuse are actually identified. It may be that there are factors associated with age, gender, type of abuse, or

severity of disability that affect likelihood of identification by authorities. Another limitation of the current study is the inability of the correlational design to specify causality in the association between maltreatment and disability.

### *Implications for Practice*

These findings highlight the need for child welfare services to provide specialized assistance to abused CWDs. The findings suggest that these children are not adequately protected even though many professionals are likely to be involved in their care. Coordinated efforts should be made to protect from victimization vulnerable individuals who already have difficulty coping with everyday life.

This study also shed light on some risk factors unique to CWDs and allowed us to identify subgroups of children at special risk. For example, boys and young CWDs (between 3 and 6 years of age) appear to be at increased risk for severe physical abuse resulting in bodily injury. Girls and older CWDs, on the other hand, are disproportionately likely to be victims of forceful sexual attacks. The identification of the specific risks for different groups may allow the development of more effective approaches to prevention.

Our study revealed that CWDs were also less likely than TD peers to disclose abuse, suggesting that many disabled victims may not be identified, and thus may not be served appropriately by welfare and criminal justice systems. Failure to disclose may also subject children to repeated abuse and prevent them from receiving support and treatment. Educational and therapeutic efforts should focus special attention on the identification of silent victims.

Overall, the findings underscore the urgent need to develop and implement strategies that may help CWDs disclose abusive experiences more promptly and effectively. CWDs are more likely to keep silent even when formally interviewed and may need to be addressed using special strategies to elicit details of the maltreatment. In particular, forensic investigators should be aware of the distress experienced by abused CWDs, especially when intrafamilial abuse is suspected, and provide at risk children who do not disclose with the necessary emotional support during the investigation. Extended or follow-up interviews with such children might also be necessary. Enhanced knowledge about the abuse of CWDs may assist professionals to make more informed decisions when attempting to detect, prevent, and treat abused CWDs.

### *Implications for Future Research*

Although previous research efforts have focused on the association between abuse and disability, we examined the characteristics of maltreatment involving CWDs in the largest sample of allegedly abused children studied to date. Our findings concerning the differing patterns of victimization involving children with minor and severe disabilities highlight the need to look more closely at specific types and degrees of disability when further exploring the association between disability and maltreatment. In addition, as mentioned above, low rates of disclosure by CWDs are especially disconcerting; researchers need to study the investigative process more fully in order to clarify and better understand why victimization is not identified or reported. The examination of interviews with CWDs might elucidate features of the disclosure process as well and play a crucial role in the development and implementation

of investigative tools or protocols that may help CWDs disclose abuse and receive the intervention and protection they need.

### Conclusion

By examining the whole population of alleged victims in Israel over a 7-year period, we were able to broaden our understanding of the ways in which CWDs are at special risk of maltreatment. Previous studies have established that these children are more likely to be victimized, and we were able to show that the risk of sexual victimization is greater for children with severe as opposed to minor disabilities, and that CWDs are disproportionately likely to be victims of sexual rather than physical abuse. In addition, we found that alleged victims with disabilities were more likely than their TD peers to delay disclosure or fail to report abuse when questioned. Like the other findings reported above, these findings have significant and sobering implications for both practitioners and researchers.

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