Patterns of Designating Special Needs in Maltreated Children by CPS Caseworkers: A Secondary Data Analysis of a Nationally Representative Data Set

Angelo P. Giardino, MD, PhD
Linda Hock-Long, PhD

Introduction

The risk for maltreatment of children with special needs or disabilities has long been of concern to both health care and child protection professionals (Garbarino, Brookhouser, & Authier, 1987; Balderian, 1991; Ammerman, 1998; Goldson, 1998; Botash, 1999). A growing professional literature supports the clinical observation that children with disabilities are at increased risk for child maltreatment (Glaser & Bentovim, 1979; Diamond & Jaudes, 1983; White, Benedict, Wulff, & Kelley, 1987; Sullivan, Brookhouser, Scanlan, Knutson, & Schulte, 1991). In an effort to better understand the epidemiology of this problem, the U.S. Congress commissioned a nationwide study to examine the incidence of maltreatment among children with disabilities (USDHHS, 1993).

In response to the Congressional commission, the National Center on Child Abuse and Neglect (NCCAN) conducted a study using a nationally representative sample of caseworkers from 36 Child Protective Service (CPS) agencies that provided information regarding all reports of maltreatment investigated and substantiated during a 6-week period in the Spring of 1991. Results of the incidence study were published in *A Report on the Maltreatment of Children With Disabilities* (referred to as the disability/child maltreatment incidence study) (USDHHS, 1993). During the study period, 1,249 substantiated cases of maltreatment were identified, representing a total of 1,834 children.

Children With Disabilities at Higher Risk for Child Maltreatment

Approximately 14% of the children either had or were suspected of having one or more disabilities, according to the Americans With Disabilities Act (ADA) definition of *disability*. The study concluded that children with known or suspected disabling conditions were 1.67 times more likely to have substantiated reports of maltreatment than children without such conditions, using an estimate of 9% for the overall estimate of children in the general population meeting a similar definition of *disability* (USDHHS, 1993). Moreover, children meeting this definition of *disability* had a 2.09 times higher risk for physical abuse, a 1.75 times higher risk for sexual abuse, and a 1.60 times higher risk for physical neglect when compared with the general population of children.

Meeting Needs for Children With Disabilities

Over the past several decades, professionals in the child development field have called attention to two issues of central importance to the care of children with disabilities who may have been maltreated. The first issue deals with the need for early identification and early provision of services for children with disabilities or special needs, and the second deals with the prevalence of unmet needs among children who enter the CPS system.

Improved developmental outcomes are clearly associated with the earliest possible identification of the disability along with early and intensive provision of appropriate services (Shonkoff & Hauser-Cram, 1987; Martin, Ramey, & Ramey, 1990; Wasik, Ramey,

Bryant,& Sparling, 1990; Ramey & Ramey, 1992; Campbell & Ramey, 1994). Comprehensive review of 38 studies examining the long-term effects of early childhood education programs found those programs to produce persistent effects on achievement and academic success that was sustained over years (Barnett, 1998).

Children who become involved in the child welfare or CPS system have a high prevalence of unmet medical, dental, developmental, and mental health/behavioral needs (Chernoff, Combs-Orme, Risley-Curtiss, & Heisler, 1994; Halfon, Mendonca, & Berkowitz, 1995; Klee, Krondstadt, & Zlotnick, 1997; Simms, 1989; Takayama, Wolfe, & Coulter, 1998). Depending on the study, anywhere from 44% to 92% of children entering foster care have at least one unmet health care need (Chernoff, et al., 1994). In addition to physical health issues, developmental delays appear to be common, and developmental delays may be identified in up to two-thirds of children entering foster care when appropriate assessment tools are used (Simms, 1989). These statistics did not markedly improve over the decade of the 1990s, and more recent studies still showed approximately 60% of children entering foster care with unmet medical problems and 57% with various developmental delays (Silver, et al., 1999a; Takayama, et al., 1998). A concerning number of children in CPS also had behavioral and mental health issues, ranging from 35% to 85%, depending on the study (Simms, 1989; Dubowitz, Zuravin, Starr, Feigelman, & Harrington, 1993; Halfon, Berkowitz, & Klee, 1992; Halfon, et al., 1995; Harman, Childs, & Kellehare, 2000). Identification of emotional and behavioral problems varied by the type of evaluation. Mental and behavioral health problems were identified in 37% of children evaluated by a multidisciplinary team of pediatric foster care specialists. In contrast, there was identification in 13.8% of children when evaluated by a routine community-based health care provider (Horowitz, Owens, & Simms, 2000).

The importance of high-quality screening and assessment services to ensure that children's needs are identified and subsequently met cannot be overstated when dealing with maltreatment concerns of children in foster care (Diamond, 1992; Halfon, et al., 1995; Silver, Haecker, & Forkey, 1999). Even with enhanced efforts at accurate identification, the challenges are substantial as Silver and colleagues (1999a) have demonstrated, showing that only half of the children in foster care who were identified as having a need go on to receive that health care-related service.

Study Questions

Understanding the relationship between a child's disability status and child maltreatment remains an essential first step to the effective development of prevention, evaluation, and treatment strategies (Elvik & Berkowitz, 1990; Valentine, 1990; Hudson & Giardino, 1996). To this end, the NCCAN disability/child maltreatment incidence study recommended that CPS caseworkers receive education about identifying disabilities, the relationship between maltreatment and disabilities, and making appropriate refer-

rals on behalf of children with disabilities (USDHHS, 1993). This secondary analysis seeks to shed further light on this important issue.

Given the fact that children with disabilities are at increased risk for maltreatment and the demonstrated benefit of early assessment and intervention services tailored to meet the needs of these children, this study sought to answer the following three questions using data from the disability/child maltreatment incidence study (USDHHS, 1993) provided by the National Data Archive on Child Abuse and Neglect (NDACAN).

Question 1: What are the primary sources that CPS caseworkers rely on to obtain information regarding a child's known or suspected disability?

Question 2: Does the information source have (a) sufficient contact with a child? (b) the professional knowledge to provide information regarding his or her condition? and, (c) Does the reliability of information used to make a disability designation vary by type of condition?

Question 3: To what extent do differences exist in caseworkers' assessment of the reliability of information sources for children with primary or secondary behavioral problems compared with children who do not have primary or secondary behavioral problems?

❖❖❖

Methods
This paper discusses a secondary analysis focused on characteristics that describe the reliability that CPS workers ascribed to the information before them when working with the case and upon which they made a disability designation of the child involved. Data files on a nationally representative sample of children who were maltreated were obtained from NDACAN. The original disability categories and types of information sources were condensed into smaller more manageable clusters via a consensus process. Descriptive and inferential statistics were then generated.

Secondary Analysis Procedures
A secondary analysis is a reanalysis of an existing data set with the goal of performing new analyses to enhance information produced from the original study. For the purpose of this analysis, eighteen disability categories (some with relatively small numbers of children) were collapsed into seven clusters using a consensus process involving child development consultants:

Disability Clusters:
- Chronic health condition
- Developmental delay (DD)
- Learning disability (LD)
- Mental retardation (MR)
- Mixed behavioral problem (behavioral problem and at least one other known/suspected disability besides MR)
- Perinatal risk factors
- Primary behavioral problem

The original "information source" categories were consolidated into five clusters as well:

Information Source Clusters:
- CPS caseworkers
- Family/friends/other
- Health care providers
- School/day care
- Social services/mental health/police, probation (SS/MH/'PP)

A "behavioral risk" variable was created, given the number of primary and secondary behavioral problems listed in the original "disability" file and the well-recognized challenges of identifying and serving children with behavioral problems among children in the CPS system. Children at least 1 year of age with the following conditions were considered to have behavioral risks: mental retardation (MR) and at least one known/suspected behavior problem, a primary behavioral problem, or a mixed behavioral problem.

Analyses
The study used descriptive and inferential analyses to answer the three research questions. The Chi-square test was used for the inferential analysis because it was based on nominal and ordinal level data.

Approximately 91%, or 274, of the 300 children in the disability file had substantiated cases of maltreatment. These children represented a total of 255 cases, as maltreatment was substantiated for more than one child with a disability in a family in some instances. Disability-related information was available for 235, or 92.2%, of the 255 cases in the electronic file provided by NDACAN. Analyses conducted to answer the first two study questions included all 235 cases. For the third study question regarding the relationship between reliability of information sources for children at least 1 year of age with and without behavioral risks, 169 cases were included in the analysis.

Results
The proportion of cases in each disability cluster is as follows: 25.5% were in perinatal risks, 18.7% were in behavioral, 15.3% were in developmental (DD), 11.1% were in chronic health, 10.6% were in mixed behavioral, 9.8% were in mental retardation (MR), and 8.9% were in learning disability (LD). Cases with perinatal risks and chronic health conditions had the lowest median ages, 0.5 and 1.0 years, respectively. The median ages for the other disability clusters were 6.0 years for DD, 8.7 years for mixed behavioral, 10.0 years for MR, and 10.8 years for LD.

The sections that follow provide results of analyses designed to answer the three study questions.

Question 1: What are the primary sources that CPS caseworkers rely on to obtain information regarding a child's known or suspected disability?
In general, the primary sources CPS caseworkers used to gather disability-related information were as follows: health care providers (39.5%), school/day care providers (23.6%), family/friends/others (15.5%), social services/mental health/police, probation (SS/MH/PP) providers (15.0%), and self (6.4%). Table 1 provides a complete breakdown of information sources by disability cluster.

Health providers represented the primary information source for cases with perinatal risks and chronic health conditions, 96.6% and 73.1%, respectively. In contrast, the primary sources for the MR and LD clusters were school/day care providers, 52.2% and 71.4%, respectively. The top three sources for the DD cluster were school/day care providers (27.8%), CPS caseworkers (25.0%), and health providers (22.2%). Primary sources for the behavioral cluster included family/friends/others (36.4%) followed by school/day care providers (29.5%). For the mixed behavioral cluster, the two primary information sources were SS/MH/PP (37.5%) and family/friends/others (29.2%).

Question 2: Does a primary information source have (a) sufficient contact with a child and (b) the professional knowledge to provide information regarding his or her condition? And, (c) Does the reliability of information used to make a disability designation vary by type of condition?

The original data set included an item regarding the CPS caseworker's perception of the extent to which the primary source used to make a disability designation had sufficient contact with a child to provide information regarding his or her physical, developmental, and/or mental health/behavioral condition. For all disability clusters combined, 87.7% of the caseworkers thought information sources had "sufficient contact." Sufficiency of contact ranged from 69.4% for the DD cluster to 100% for the LD cluster. In respect to "professional knowledge," 74.6% of the caseworkers believed information sources had the expertise to make a disability designation. Responses to this question ranged from 52.0% for the mixed behavioral cluster to 98.3% for the perinatal risk cluster. Table 2 lists ratings for "yes" responses regarding "sufficient contact" and "professional knowledge" by disability cluster.

In addition to responding to the item about sufficiency of contact with a child, CPS caseworkers also rated the reliability of disability-related information provided by primary sources. For the entire set of disability clusters, the caseworkers rated information sources either as "very reliable," 91.5%, or "somewhat reliable," 8.5%. As Table 3 illustrates, the percentages varied by disability cluster, with "very reliable" ranging from 76.0% for cases with mixed behavioral problems to 98.3% for cases with perinatal risks.

Question 3: To what extent do differences exist in CPS caseworkers' assessment of the reliability of information sources for children with primary or secondary behavioral problems compared with children who do not have primary or secondary behavioral problems?

A Chi-square analysis was conducted to examine the relationship between reliability of information sources used to make a disability determination for children who were at least 1 year of age with a primary or secondary behavioral problem and children in this age group who did not have a primary or secondary behavioral problem. A significant difference (C2 = 6.918, p < .01) emerged for these two groups. Although 82.2% of the information sources for children with primary or secondary behavioral problems were perceived as being "very reliable," 94.8% of the sources for children without these problems were rated "very reliable."

Discussion

This secondary analysis further describes CPS caseworkers' designation of disability and special needs among a nationally representative group of maltreated children previously described in 1993. The patterns in designating disability that emerge are important to consider by health care providers and CPS officials. Specifically, understanding what underlies caseworkers' designations of disability is a fundamental first step in determining if a problem exists. This information may also suggest what types of training for CPS caseworkers may be useful in the future. Additionally, one could argue that the types of disabilities that are more readily identified, and those considered more reliably identified when compared with other types, may ultimately influence what is designated as a disability. Further, such identification may also determine what set of services is necessary to serve a given population of children and families. The sets of services and programs that CPS agencies feel a need to prioritize and support may be materially impacted by the perceived need for such services, based on how prevalent various disabilities are thought to be within a given group of children.

It appears that the more obvious physical disabilities and special needs included in the DD and perinatal risk factors categories, which could be potentially easy to identify by caseworkers on their own, are ascribed more reliability than the less obvious cognitive and behavioral health-related disabilities, such as LD, MR, and primary behavioral and mixed behavioral problem categories. Health care professional sources most frequently provide the information upon which the chronic disease and perinatal risk factors disability cluster designation is made, whereas in the primary behavioral problem category, a high number of family and friends provide the caseworker with information used for the designation. Not surprisingly then, the information sources for primary behavioral and mixed behavioral problems are seen as less reliable when compared with other categories. This category has the lowest rated information sources in terms of the caseworker's perception of professional knowledge and opportunity to assess the actual child in question. The children with behavioral disabilities may be at a particular disadvantage as far as identification and access to services, owing to these patterns of perceived reliability and competence on the part of the information sources used to identify them. Additional research will need to be conducted to confirm this, however.

The identification of developmental and mental health/behavioral problems in the foster care population is generally not an easy task and, in fact, is a complex endeavor. Relatively recent program evaluations have demonstrated that the types of screening tools used materially affect the identification of a developmental disability, as do the skill and awareness levels of the evaluator (Horwitz, Owens, & Simms, 2000; Blatt, et al., 1997). Therefore, the idea that CPS case workers may designate a disability on the basis of a heterogeneous collection of information drawn from a variety of sources is of great concern. This argues for increased professional screening and evaluation to ferret out the existence of physical as well as developmental and behavioral problems and to ensure that attention is paid to the need for services in all these areas. Accurate identification of the true prevalence of the child's unmet needs would then contribute substantively to the planning of necessary services. The most sensitive evaluation would require CPS to obtain a complete medical, developmental, and mental health assessment at the time of entry into the system (Silver, 1999). Such timely and professionally competent evaluations would have the highest likelihood of identifying the child's needs early on and would promote the early provision of necessary services.

With regard to behavioral health problems, mental health/behavioral services for children have historically been difficult to find (Steinberg, Gadomski, & Wilson, 1999). If one recognizes that CPS

workers may not receive what they see as reliable information from which to identify behaviorally related disabilities, as compared with medically oriented conditions, then the formulation and delivery of behavioral and developmentally oriented services may be even less likely to occur.

Limitations

A study such as this, based on secondary data analysis, has a number of limitations. Despite the nationally representative sample, it relies on data collected by others for purposes of the original study. The investigators may only analyze what has already been collected and must of necessity work with the data that are available. There is no opportunity for the researchers to go back and collect additional information from the original study participants. This is a well-recognized shortcoming of many secondary analyses (Moriarty, Deatrick, Mahon, Feetham, Carroll, Shepard, & Orsi 1999; Shepard, Carroll, Mahon, Moriarty, Feetham, Deatrick, & Orsi, 1999; Huston & Naylor, 2000). The assessment and designation of a disability in the children were made by caseworkers who may not have had sufficient training, which calls into question the accuracy of the data. Additionally, many of the children had suspected disabilities, not verified conditions. However, previously cited literature supports the high prevalence of similar problems in the children who come into the CPS system. Finally, disabilities related to perinatal risk factors may be overrepresented in this data set, which could skew the results as well.

Summary

In conclusion, CPS workers face many challenges as they work to serve children who are maltreated (Dubowitz & Depanfilis, 2000). These challenges are magnified when the child who has been maltreated also has special needs (Hudson & Giardino, 1996). This analysis demonstrates that for some disability types, the information used by CPS workers is viewed as very reliable by them and allows for a confident designation of a child as having a special need. However, for other types of special needs, the often less obvious behaviorally oriented type, the designation is seen as less reliable and is made relying on information that is perceived as more suspect. The disparity among disability types needs further exploration to determine if the ambiguity surrounding disability designation actually affects identification and referral for appropriate services in a timely manner. A prospective study that uses medical, child development, and mental health professionals performing complete evaluations on children immediately upon entry into the CPS system would be best able to provide a definitive response to these concerns.

Table 1. Information Source by Disability Cluster (n = 233)					
Disability Cluster	"SS/MH/PP"	"School"	"Health"	"Family"	"Worker"
MR	21.7%	52.2%	4.3%	13.0%	8.7%
DD	13.9	27.8	22.2	11.1	25.0
Chronic health	-	3.8	73.1	19.2	3.8
LD	19.0	71.4	4.8	4.8	-
Behavioral	22.7	29.5	9.1	36.4	2.3
Mixed behavioral	37.5	16.7	8.3	29.2	8.3
Perinatal risks	3.4	-	96.6	-	-

Table 2. Sufficiency of Contact and Professional Knowledge by Disability Cluster		
Disability Cluster	Had Sufficient Contact	Had Professional Knowledge
MR	91.3%	69.6%
DD	69.4	61.1
Chronic health	84.6	73.1
LD	100.0	85.7
Behavioral	93.2	63.6
Mixed behavioral	80.0	52.0
Perinatal risks	93.3	93.3

Table 3. Reliability of Information Source by Disability Cluster (n = 235)		
Disability Cluster	Very Reliable	Somewhat Reliable
MR	95.7%	4.3%
DD	97.2	2.8
Chronic health	92.3	7.7
LD	90.5	9.5
Behavioral	84.1	15.9
Mixed behavioral	76.0	24.0
Perinatal risks	98.3	1.7

NDACAN Database Description

NDACAN maintains electronic data files from the disability/child maltreatment incidence study, which are available to researchers interested in conducting secondary data analyses. Of the five files, one contains case-level information on all study cases (n = 1,249), a second has information regarding children with known or suspected disabilities (n = 300), and a third file contains information regarding adults suspected of having substance abuse problems (n = 635). The fourth file contains information regarding all children in a family in which at least one child had a substantiated incident of abuse or neglect (n = 2,662). The fifth file contains case information regarding all adults involved in substantiated cases (n = 2,305).

This analysis used two national study files: the first contains disability-related information and the other contains child-related information. The file on children with known or suspected disabilities includes variables such as disability/condition categories, sources used to obtain information regarding disabilities/conditions, and caseworker assessment of information source reliability. The child-based file includes demographic data and information regarding relationships among children and adults involved in a case as well as timing and type of maltreatment.

AUTHORS

Angelo P. Giardino, MD, PhD, is Associate Professor and Associate Chair of Pediatrics at Drexel University College of Medicine and Vice President for Clinical Affairs at St. Christopher's Hospital for Children in Philadelphia, PA. He has been a member of APSAC since 1992.

Linda Hock Long, PhD, was the Senior Researcher at the Office of Maternal and Child Health, Philadelphia Health Department and prior to that was a practicing social worker at Children's Seashore House in Philadelphia.

References

Ammerman, R. T. (1998). Attention to the issues surrounding abuse and neglect of children with disabilities. *Child Abuse & Neglect, 22*(7), 661-662.

Ammerman, R. T., Van Hasselt, V. B., Hersen, M., McGonigle, J. J., & Lubetsky, M. J. (1989). Abuse and neglect in psychiatrically hospitalized multihandicapped children. *Child Abuse & Neglect, 13*, 335-343.

Balderian, N. (1991). Sexual abuse of people with developmental disabilities. *Sexuality and Disability, 9,* 323-335.

Barnett, W. S. (1998). Long-term cognitive and academic effects of early childhood education on children in poverty. *Preventive Medicine, 27*(2), 204-207.

Blatt, S. D, Saletsky, R.D., Meguid, V., Church, C. C., O'Hara, M., Haller, S., & Anderson, J. A. (1997). A comprehensive, multidisciplinary approach to providing health care for children in out-of-home care. *Child Welfare, 76*, 331-347.

Botash, A. S. (1999). Child abuse and disabilities: A medical perspective. *American Professional Society on the Abuse of Children Advisor, 12*(1), 10-13.

Campbell, F. A., & Ramey, C. T. (1994). Effects of early intervention on intellectual and academic achievement: A follow-up study of children from low-income families. *Child Development, 62*(2 Spec No), 684-698.

Chernoff, R., Combs-Orme, T., Risley-Curtiss, C., & Heisler, A. (1994). Assessing the health status of children entering foster care. *Pediatrics, 93*, 594-601.

Diamond, P. (1992). Children in placement. In S. Ludwig & A. E. Kornberg (Eds.), *Child abuse: A medical reference* (2nd ed.). New York: Churchill Livingstone.

Diamond, L. J., & Jaudes, P. K. (1983). Child abuse in a cerebral-palsied population. *Developmental Medicine & Child Neurolology, 25,* 169-174.

Dubowitz, H., & DePanfilis, D. (2000). *Handbook for child protection practice.* Thousand Oaks, CA: Sage.

Dubowitz, H., Zuravin, S., Starr, R. H., Feigelman, S., & Harrington, D. (1993). Behavior problems of children in kinship care. *Journal of Developmental and Behavioral Pediatrics, 14*, 386-393.

Elvik, S. L., & Berkowitz, C. (1990). Sexual abuse in the developmentally disabled: Dilemmas of diagnosis. *Child Abuse & Neglect, 14*, 497-502.

Garbarino, J., Brookhouser, P., & Authier, K. J. (Eds.). (1987). *Special children, special risks: The maltreatment of children with disabilities.* New York: Aldine.

Gibbs, E. D., & Teti, D. M. (1990). *Interdisciplinary assessment of infants: A guide for early intervention professionals.* Baltimore, MD: Paul H. Brookes.

Glaser, D., & Bentovim, A. (1979). Abuse and risk to handicapped and chronically ill children. *Child Abuse & Neglect, 3*, 565-575.

Goldson, E. (1988). Children with disabilities and child maltreatment. *Child Abuse & Neglect, 22*(7), 663-667.

Halfon, N., Berkowitz, G., & Klee, L. (1992). Mental health service utilization by children in foster care in California. *Pediatrics, 89*, 1238-1244.

Halfon, N., Mendonca, A., & Berkowitz, G. (1995). Health status of children in foster care: The experience of the Center for the Vulnerable Child. *Archives of Pediatric Adolescent Medicine, 149*, 386-392.

Harman, J. S., Childs, G. E., & Kellehare, K. J. (2000). Mental health care utilization and expenditures by children in foster care. *Archives of Pediatric Adolescent Medicine, 154*, 1114-1117.

Hochstadt, N. J., Jaudes, P. K., Zimo, D. A., & Schachter, J. (1987). The medical and psychosocial needs of children entering foster care. *Child Abuse & Neglect, 11*, 53-62.

Horowitz, S. M., Owens, P., & Simms, M. D. (2000). Specialized assessments for children in foster care. *Pediatrics, 106*(1), 59-66.

Hudson, K. M., & Giardino, A. P. (1996). Child abuse and neglect. In L.A. Kurtz, P. W. Dowrick, S. E. Levy, & M. L. Batshaw (Eds.), *Handbook of developmental disabilities* (pp. 542-554). Gaithersburg, MD: Aspen.

Huston, P., & Naylor, C. D. (2000). Health services research: Reporting on studies using secondary data sources. *Canadian Medical Association, 155*(12), 1697-1702.

Klee, L., Krondstadt, D., & Zlotnick, C. (1997). Foster care's youngest: A preliminary report. *American Journal of Orthopsychiatry, 67*, 290-299.

Martin, S. L., Ramey, C. T., & Ramey, S. (1990). The prevention of intellectual impairment in children of impoverished families: Findings of a randomized trial of educational day care. *American Journal of Public Health, 80*(7), 844-847.

Moriarty, H. J., Deatrick, J. A., Mahon, M. M., Feetham, S. L., Carroll, R. M., Shepard, M. P., & Orsi, A. J. (1999). Issues to consider when choosing and using large national databases for research of families. *Western Journal of Nursing Research, 21*(2), 143-153.

Ramey, C. T., & Ramey, S. L. (1992). Effective early intervention. *Mental Retardation, 30*(6), 337-345.

Shepard, M. P., Carroll, R. M., Mahon, M. M., Moriarty, H. J., Feetham, S. L., Deatrick, J. A., & Orsi, A. J. (1999). Conceptual and pragmatic considerations in conducting a secondary analysis: An example from research of families. *Western Journal of Nursing Research, 21*(2), 154-167.

Shonkoff, J. P., & Hauser-Cram, P. (1987). Early intervention for disabled infants and their families: A quantitative analysis. *Pediatrics, 80*(5), 650-658.

Silver, J. A., Haecker, T., & Forkey, H. C. (1999). Health care for young children in foster care. In J. Silver, B. Amster, & T. Haecker (Eds.), *Young children and foster care: A guide for professionals* (pp. 161-193). Baltimore, MD: Paul H. Brookes.

Simms, M. (1989). The foster care clinic: A community program to identify treatment needs of children in foster care. *Developmental and Behavioral Pediatrics, 10*, 121-128.

Steinberg, A. G., Gadomski, A., Wilson, M. D. (1999). *Children's mental health: The changing interface between primary and specialty care.* Report of the Children's Mental Health Alliance Project, Philadelphia, PA. Sponsored by the Agency for Health Care Policy and Research (Grant number R13-HS0913-01) and The Robert Wood Johnson Foundation (ID #032503).

Sullivan, P. M., Brookhouser, P. E., Scanlan, J. M., Knutson, J. F., & Schulte, L. E. (1991). Patterns of physical and sexual abuse of communicatively handicapped children. *Annals of Otology, Rhinology, and Laryngology, 100*, 188-194.

Takayama, J. I., Wolfe, E., & Coulter, K. P. (1998). Relationship between reason for placement and medical findings among children in foster care. *Pediatrics, 101*, 201-207.

U.S. Dept. of Health and Human Services. (1994). *Child Health USA 93.* DHHS Pub. No. HRSA-MCH-94-1. Washington, DC: Government Printing Office.

U.S. Dept. of Health and Human Services. (1993). *A report on the maltreatment of children with disabilities.* James Bell Associates, Inc., No. 105-89-16300. Washington, DC: Westat.

Valentine, D. P. (1990). Double jeopardy: Child maltreatment and mental retardation. *Child and Adolescent Social Work Journal, 7*, 487-499.

Wasik, B. H., Ramey, C. T., Bryant, D. M., & Sparling, J. J. (1990). A longitudinal study of two early intervention strategies: Project CARE. *Child Development, 61*(6), 1682-1696.

White, R., Benedict, M. I., Wulff, L., & Kelley, M. (1987). Physical disabilities as risk factors for child maltreatment: A selected review. *American Journal of Orthopsychiatry; 57*(1), 93-101.