

Special health needs of children investigated for maltreatment: An analysis from the second National Survey of Child and Adolescent Well-being



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Executive Summary

The prevalence of special health care needs (SHCN) among children who are investigated for maltreatment



is very high (Ringeisen, Casanueva, Urato, & Cross, 2008; Stein, et al., 2013). Therefore, the current study uses data from the second National

Survey of Child and Adolescent Well-being to **(1)** describe the prevalence of special health care needs of children involved in the US child welfare system and **(2)** to identify which specific needs are predictors of out-of-home placement. Results show that the most prevalent SHCN for this population is ADHD at 16.5% of children investigated for maltreatment. The least prevalent needs are muscular dystrophy and cystic fibrosis. Behavioral SHCNs are more predictive of out-of-home placement than physical needs. Such behavioral needs include emotional development delay, ADHD, mental retardation or developmental delay, and emotional problems such as depression or anxiety. These four health needs are associated with an *increased* likelihood of out-of-home placement.

Implications for child welfare agencies may include: re-examining decision making processes that lead to out-of-home placement for children with SHCNs, ensuring the availability of behavioral health services for system-involved children, and providing supports for foster parents whose children exhibit behavioral SHCNs.

Introduction

Special health care needs (SHCN) are defined by the American Academy of Pediatrics to include children “who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally” (McPherson, et al., 1998). It is estimated that the prevalence of special health needs among children is between 13-19% in the general US population (Bethell, Read, Blumberg, & Newacheck, 2008). However, the prevalence of SHCN and/or chronic health conditions (CHC) (e.g., asthma, autism, heart problems, etc.) among children who are investigated by child welfare services is much higher, with estimates ranging from 31-50% (Ringeisen, et al., 2008; Stein, et al., 2013). For children who spend time in out-of-home placement, the prevalence may be higher still (Ringeisen, et al., 2008).

Children with SHCN may also be at additional risk of experiencing abuse and neglect (Kortenkamp & Ehrle, 2002), but research is relatively unclear on which specific health needs or chronic conditions may leave children susceptible to maltreatment. Special health needs or chronic health conditions can have a financial, physical, and emotional toll on the family (Reichman, Corman, & Noonan, 2008), increasing stress in the home and subsequently increasing the likelihood of maltreatment. Researchers have typically chosen to combine multiple special health needs and chronic conditions to create indicators of healthy versus non-healthy children, although some research has focused on specific conditions (e.g. hearing impairment, Schenkel, et al., 2014). Research on the

association between disabled status and abuse has received attention over the past two decades, with mixed results. Brown et al (1998) surveyed 644 families from upstate New York on four occasions between 1975 and 1992, obtaining records on abuse and neglect as well as retrospective self-reports of experiencing maltreatment. They found that handicap status was associated with an increased probability of experiencing sexual abuse. Sullivan and Knutson (2000) found the prevalence rate of maltreatment among disabled children to be 31%, compared to 9% for nondisabled children in a cohort of school-aged children across Omaha, Nebraska during the 1994-95 school year. However, Govindshenoy and Spencer (2007) reviewed research on disability status and abuse between 1966 and 2006, finding only four studies that met specific inclusion criteria (i.e., population-based, case-control or cross sectional study of children less than 18 years of age). **One study provided evidence that cerebral palsy is predictive of physical abuse, three found an association between psychological and emotional disability and abuse, and two studies found an association between learning disability and abuse.**

More recent studies have looked at specific special health needs and chronic conditions and their relationship to abuse. Jaudes and Mackey-Bilaver (2008) studied a sample of low-income families who had a young child continuously enrolled in Medicaid through the age of 3. They assessed the impacts of chronic physical illness, developmental delay/mental retardation, and behavioral/mental health conditions on occurrence of maltreatment. They found that at any given time point, children with behavioral/mental health conditions had twice the risk of becoming victims of maltreatment. Children with chronic health conditions had about 10% greater risk of maltreatment. Children with a developmental delay or mental retardation were not at elevated risk for maltreatment. **Most strikingly, children who already had a history of maltreatment and had a behavioral health condition were almost 10 times more likely to be maltreated again.** Children with internalizing psychological disorders may be at increased risk for

maltreatment and sexual victimization as well (Turner, Vanderminden, Finkelhor, Hamby, & Shattuck, 2011). Schenkel et al. (2014) found that deaf and hard of hearing college students reported significantly more experiences of child maltreatment than college students who were not deaf or hard of hearing. Further, severity of deafness resulted in increased risk for maltreatment. Svensson, Bornehag, and Janson (2011) found that Swedish children with chronic health conditions, such as hearing impairment, asthma, eczema, ADHD/ADD, among other health conditions, were more likely to be physically abused when exposed to inter-partner violence than children who were not exposed. Further, low-income status increased the chances for experiencing abuse as well. Finally, the combination of special health needs and maltreatment can also lead to poor social and academic outcomes for these children. For example, Berg, Shiu, Msall, and Acharya (2015) found that youth with disabilities – physical, neurodevelopmental, and learning, attention, behavioral health – who are also involved with child welfare services and report victimization are less likely to be involved in developmentally appropriate activities (hobbies, sports) compared to youth without disabilities. Haight, Kayama, Kincaid, Evans, and Kim (2013) provided reasons why maltreatment history mixed with mild or cognitive behavioral disabilities may contribute to low school functioning. Thus, researchers have attempted to understand whether particular special health needs or chronic conditions may leave children especially vulnerable to maltreatment, though little agreement exists on the relative impacts of different sorts of disabilities or health conditions.

Child abuse and neglect is a critical public health issue with repercussions for the individual and society at large. In 2013, about 240,000 children in the United States were placed in foster care following an investigation of maltreatment or an alternative response from a child welfare agency (US Department of Health and Human Services, 2015), though this does not always protect them from experiencing more maltreatment (e.g. Biehal, 2014). Children who enter out-of-home care often come with various health

issues that span physical, developmental, and psychiatric domains, and many do not receive adequate health care prior to entering out-of-home placement or even during out-of-home placement (Simms, Dubowitz, & Szilagyi, 2000). There is also mounting evidence that children who live in certain environments or who exhibit certain characteristics are at risk of experiencing maltreatment, and may subsequently transition into out-of-home care. There is, however, scant literature comparing the relative associations between specific special health needs/chronic conditions and chances of out-of-home placement for children involved in the child welfare system. In a recent systematic literature review, Simkiss, Stallard, and Thorogood (2013) found that risk markers for entering the English public care system (i.e., the foster care system) included the following: mothers' socio-economic status, welfare reception, single parenthood, ethnicity, age, disability, smoking during pregnancy, mental illness, alcohol misuse, and learning difficulties. Children who were born premature or had a low birthweight, had a chronic disease, had a history of injuries, or had been taken to emergency rooms were also at heightened risk of out-of-home placement (Friedlaender, et al., 2005). Thus, children who live in certain environments or have certain characteristics, such as a chronic disease or history of injury, seem to be more susceptible to experiencing maltreatment, which in turn may lead to out-of-home placement.

In this paper, using data from the second National Survey of Child and Adolescent Well-being (NSCAW II), we complete two objectives. **First, we describe the prevalence of special health care needs of children involved in the US child welfare system and second, we identify which specific needs are predictors of out-of-home placement in the child welfare system.**

Methods

Our approach is to use secondary data analysis of the second National Survey of Child and Adolescent Well-being (NSCAW II). The NSCAW II study was comprised

of children (aged 0 to 17.5 years) who were the subject of a maltreatment investigation by Child Protective Services (CPS) between February 2008 and April 2009. Baseline data were collected shortly following the close of the investigation. Follow-up data were collected at 18 months after investigation and again beginning at 36 months after investigation. The study includes all 5872 children who were part of the NSCAW II sample. Statistical weighting produces results that are representative of the entire population of children investigated for maltreatment.

The items used for this study came from the Child Health and Services module of NSCAW. Responses were provided by the child's current caregiver, which included both permanent and foster caregivers, depending on the child's living situation. As an example, the caregiver was asked questions such as: "Have you been told by a medical doctor or specialist that [child's name] has a serious delay in [his or her] physical growth or development?" and "To the best of your knowledge, does [child's name] currently have any of the following: Asthma? [or] Attention Deficit Disorder or Attention Deficit Hyperactivity Disorder, that is ADD or ADHD?" and so on for the other special health needs.

Results

Table 1 below displays the nationally representative percentage estimate for the prevalence of each special healthcare need among children investigated for maltreatment by child protective services. The confidence interval for the estimate provides reasonable bounds within which the percentage estimate can vary. For example, the estimated percentage of children investigated for maltreatment who have a physical growth delay is 5.6%. The lowest reasonable estimate is 4.2%; the highest is 7.0%. If one were to take 100 representative samples of children investigated for maltreatment and to estimate the percentage of children who have a physical growth delay, in 95 samples out of 100, the estimate would be between 4.2% and 7.0%.

The special healthcare needs with the lowest prevalence among investigated children are cystic fibrosis and muscular dystrophy at 0.0%. There were only 6 children in the sample whose caregiver reported that they had cystic fibrosis and only 1 child with muscular dystrophy. The special healthcare needs with the highest prevalence are depression/anxiety at 14.3%, asthma at 16.0% and attention deficit hyperactivity disorder at 16.5%.

Table 2 displays the results of the several regression models which show whether or not each of the special healthcare needs are predictive of out-of-home placement. Regression models were fit only for special healthcare needs for which the population estimate in Table 1 showed that more than 1% of investigated children experienced the particular healthcare need. Thus, models have not been estimated for Down syndrome, diabetes, cystic fibrosis, cerebral palsy or muscular dystrophy due to small sample sizes. We selected a more liberal p -value of $p < .10$ instead of $p < .05$ in order to capture a wider range of special healthcare needs which may be predictive of out-of-home placement. By doing so, we hope to encourage broad consideration regarding how child welfare practice and special health needs may interact to influence placement decisions.

Results show that four special health needs are associated with out-of-home placement at baseline (within 2-6 months after investigation). These include: emotional growth or development delay, ADHD, mental retardation or developmental delay and emotional problems such as depression or anxiety. All of these health needs are associated with increased likelihood of out-of-home placement at baseline. At 18 months following the investigation, emotional delay (as measured at baseline) is no longer associated with out-of-home placement. However, ADHD, mental retardation or developmental delay and emotional problems (all measured at baseline) all continue to positively predict out-of-home placement. Heart problems were also associated with out-of-home placement, but only at the 18-month follow-up and they predicted a lower likelihood of out-of-home

placement. Finally, at 36 month follow-up, baseline attention deficit hyperactivity disorder remains predictive of out-of-home placement. There is some evidence for mental retardation continuing to be predictive of out-of-home placement ($p = .11$). Emotional problems measured at baseline also continue to predict out-of-home placement at 36 months ($p = .05$). Blood problems were also associated with out-of-home placement, but only at the 36-month follow-up and they predicted a lower likelihood of out-of-home placement.

Table 1*Proportion of children investigated for maltreatment with specific special health needs*

Child Special Health Need	Percent of children at baseline	95% Confidence interval
ADD/ADHD	16.5%	(14.7%, 18.3%)
Asthma	16.0%	(14.2%, 17.8%)
Depression, anxiety, eating disorder, emotional problem	14.3%	(11.7%, 16.9%)
Emotional growth or development delay	8.3%	(6.8%, 9.7%)
Nearly blind or difficulty seeing	6.7%	(5.1%, 8.3%)
Migraine or frequent headache	6.3%	(5.1%, 7.6%)
Physical growth or development delay	5.6%	(4.2%, 7.0%)
Mental retardation or developmental delay	4.8%	(3.6%, 5.9%)
Nearly deaf or difficulty hearing	2.2%	(1.6%, 2.9%)
Arthritis or joint problems	2.1%	(1.3%, 2.8%)
Autism/ASD	2.0%	(1.1%, 2.9%)
Blood problems	1.6%	(1.0%, 2.1%)
Heart problem	1.3%	(0.7%, 1.9%)
Epilepsy or seizure disorder	1.1%	(0.6%, 1.6%)
Cerebral palsy	0.7%	(0.3%, 1.1%)
Down syndrome	0.4%	(0.0%, 0.8%)
Diabetes	0.4%	(0.0%, 0.9%)
Cystic fibrosis	0.0%	(0.0%, 0.0%)
Muscular dystrophy	0.0%	(0.0%, 0.1%)

Table 2*Special health needs predicting out-of-home placement*

Child Special Health Need	Out-of-home placement at baseline	Out-of-home placement at 18 months	Out-of-home placement at 36 months
Physical growth or development delay	NS	NS	NS
Emotional growth or development delay	<i>p<.10</i>	NS	NS
Nearly blind or difficulty seeing	NS	NS	NS
Nearly deaf or difficulty hearing	NS	NS	NS
Asthma	NS	NS	NS
ADD/ADHD	<i>p<.05</i>	<i>p<.05</i>	<i>p<.01</i>
Autism/ASD	NS	NS	NS
Mental retardation or developmental delay	<i>p<.01</i>	<i>p<.10</i>	<i>p=.11</i>
Depression, anxiety, eating disorder, emotional problem	<i>p<.001</i>	<i>p<.01</i>	<i>p=.05</i>
Heart problem	NS	<i>p<.05</i>	NS
Blood problems	NS	NS	<i>p<.05</i>
Epilepsy or seizure disorder	NS	NS	NS
Migraine or frequent headache	NS	NS	NS
Arthritis or joint problems	NS	NS	NS

Discussion

These data and analyses support the notion that physical special health needs are less predictive of out-of-home placement than are emotional or behavioral health needs. Based on the NSCAW data, physical growth and delay is not predictive of out-of-home placement; neither are such health needs as vision or hearing problems, asthma, headaches or arthritis. Behavioral and developmental special health needs *are* predictive of out-of-home placement in several instances, including emotional delay, ADD/ADHD, mental retardation and health needs such as depression or anxiety.

As noted above, the NSCAW data come from caregivers who are interviewed between 2 and 6 months after a child welfare investigation. At that time it is simultaneously documented (1) whether the child has been placed out-of-home and (2) whether the child has specific special health care needs. Therefore, when using only the baseline NSCAW data, we cannot be sure which came first, diagnosis of the special health need or the out-of-home placement. Perhaps behaviors preceded placement and influenced that decision or perhaps the child was placed and behavioral special health care needs got worse after placement. However, even if a behavioral SHCN is undiagnosed at the time of the investigation, conditions such as emotional delay, ADD or developmental delays would have been present at the time of investigation; such chronic special health needs would not typically develop entirely during the 2- to 6-months between investigation and the caregiver interview. Furthermore, at the later times (18 and 36 months), we find that baseline assessments of special health need for some of the behavioral healthcare conditions continue to predict out-of-home placement. **Therefore, evidence from this study points to the fact that children with existing behavioral health needs are more likely to be placed out-of-home than are children without such needs.**

The situation could be reversed for behavioral health conditions such as depression or anxiety, which can

arise as a result of the child experiencing trauma both from maltreatment and when removed from their home. In this case, it is plausible that a child placed out-of-home at the baseline investigation and who did not yet experience depression or anxiety could be diagnosed with one of these special health needs by the time the NSCAW baseline data were collected at 2-6 months following investigation. This may especially be the case if a foster child must meet some criterion of 'medical necessity' in order to access treatment.

Two principal implications are suggested from the study. **First, given that there is some evidence that behavioral health needs both precede and predict out-of-home placement, child welfare agencies should consider whether existing agency decision-making processes lead to children with such needs being placed out-of-home more frequently than children without such needs.** This suggests that such agency decision-making processes might be reviewed for possible bias and revised accordingly. Furthermore, agencies might profitably examine whether providing additional up-front behavioral health assessment and services for a child can enable that child to remain safely at home and avoid an out-of-home placement. **Secondly, for children already placed out-of-home, this study suggests that it is important to support foster parents with education around behavioral health issues and the types of behaviors which may be exhibited by their foster child.** Agency processes and funding which support the provision of behavioral health services and respite care for foster parents are also important considerations.

Conclusion

In sum, study of the NSCAW data provide some evidence that behavioral special health needs are more predictive of out-of-home placement than physical special health needs. Child welfare agencies can use such information to consider whether decision making processes which lead to out-of-home placement may result in children with behavioral

needs being more likely to be placed out-of-home. The possibility that out-of-home placement may also cause or aggravate such behavioral health conditions as depression or anxiety should also be considered. These are important considerations can help to ensure that children are only placed out-of-home when truly necessary and that all children served by child welfare agencies receive the services they need.

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