

## An unlikely advocate: the role of the school nurse with children who have dyslexia

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### **Abstract:**

School nurses are often the first line of advocacy for children when problems arise. One common learning disability, dyslexia, requires advocacy from the school nurse. However, due to lack of knowledge, misunderstandings, and misconceptions about the disorder, the school nurse may feel inadequate in an advocacy role. This article describes dyslexia, including warning signs, so that school nurses can be better prepared to assess for signs, provide intervention, and advocate for struggling children and families.

**Keywords:** learning disabilities | dyslexia | school nursing | advocacy | pediatrics

### **Article:**

Most school nurses have encountered it: A crying child with vague complaints, such as a stomachache or headache, visits the nurse often. The teacher may note that the visit requests come during reading group or other activities that require the child to read aloud. The nurse learns through the child's report that things are okay at home but that he just "doesn't like school." The teacher reports that the child is becoming withdrawn and has an increasing number of absences. What role can the school nurse play in this situation?

School nurses may not recognize that the symptoms this child displays are related to dyslexia, a common yet underdiagnosed neurological condition that requires early intervention to avoid long-term social, emotional, and academic consequences. Constant exposure to school failures results in stress and anxiety in children, which may present in physiological symptoms that warrant a visit to the school nurse. School nurses are a part of the team that can support the child and family through identification, diagnosis, and intervention. However, school nurses need to

understand what dyslexia is and how to recognize the signs and symptoms in order to advocate for children and their families.

## **Defining Dyslexia**

The International Dyslexia Association (IDA, 2012) defines dyslexia as

a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge.

Simplistically stated, dyslexia is difficulty reading despite average to above average intelligence and adequate teaching. It is not, as often believed, seeing words backward. Dyslexia, a language-based disability, affects many aspects of education, such as reading, spelling, and writing (IDA, 2012). Dyslexia is found in all languages and cultures and often co-exists with other disabilities, such as attention deficit hyperactivity disorder (Peterson & Pennington, 2012). Estimating the number of people with dyslexia is difficult, however, because there is no clear cut-off between being dyslexic and non-dyslexic. Furthermore, the degree of severity varies greatly among individuals. Some researchers believe that 5% to 10% of the worldwide population are dyslexic (Siegel, 2006), while others believe the figure is as high as 20% (University of Michigan, n.d.). Regardless of the exact numbers, dyslexia is the most common reading disorder in children.

## **Recognizing Signs and Symptoms**

One of the first signs that a learning disability might exist is psychosomatic complaints. These complaints are only a piece of the puzzle, but they are significant because they are often the result of how hard the child is working. Elbro and Jensen (2005) found that children with dyslexia require more time to acquire new information; thus, they must work harder than other children at tasks that might seem “easy.” This extra work can result in headaches, eye strain, and fatigue.

A thorough health history often reveals risk factors such as preterm birth, early and frequent ear infections, and delayed speech. McBride-Chang et al. (2011) found that delayed speech and having a family member with dyslexia were the two greatest predictors of a subsequent diagnosis of dyslexia. Assessing for common warning signs of dyslexia depends on the age of the child (see Table 1). Barton (2002) has identified signs based on the child’s educational level: preschool, elementary, and high school. Preschool children demonstrate difficulty learning the alphabet, memorizing addresses and phone numbers, and distinguishing left from right. Too often, these signs are ignored, especially when the child has not yet attended school. However, a child who has experienced prekindergarten or some other formal preschool education should have the ability to do these tasks (Barton, 2002).

**Table 1.** Common Warning Signs of Dyslexia

<b>Age of Child</b>	<b>Warning Signs</b>
Preschool	Difficulty learning the alphabet, learning phone number/address, and distinguishing left from right
Elementary school	Difficulty with reading, spelling, and math (including multiplication, telling time, and long division)
High school	Difficulty learning foreign language, reading music, and writing

Elementary school-age children begin to experience difficulty when being taught to read, and some difficulties are predictable, such as leaving out prepositions when reading (at, to, of) or being unable to read articles (a, an, the), as well as slow, choppy reading. The child has no ability to “word attack,” or sound out an unfamiliar word, and makes random guesses at the word based on the shape of the word or the context of the story. Poor spelling is often one of the classic signs of dyslexia because the child has no ability to use phonetics in learning to spell. Math is also problematic, particularly when learning concepts or tasks that require memorization (multiplication tables), directionality (telling time), or sequencing (long division). These children may also have unusually messy backpacks, desks, and cubbies (Barton, 2002).

In addition to the earlier signs, high school students with dyslexia may also have difficulty learning foreign languages, reading music, and writing. There is often a discrepancy between verbal skills and written skills. Elbro and Jensen (2005) found that adolescents with dyslexia had a smaller vocabulary than expected, given their ages, indicating language impairment that resulted from years of poor reading. Finally, high school students often have poor grades, which may lead them to drop out of school (Barton, 2002).

## **Diagnosis**

The IDA (2012) stated that evaluation is more accurate than diagnosis when determining whether someone has dyslexia. There is no one test that can diagnose dyslexia; therefore, a holistic and comprehensive evaluation is necessary. Researchers have identified the following components of the evaluation: language, phonological awareness, rapid naming, reading fluency, reading comprehension, spelling, and writing (University of Michigan, n.d.). Tops et al. (2012) have narrowed the required screenings to only three tests: word reading, word spelling, and phonological awareness.

Siegel (2006) stated that an IQ test is not necessary to diagnose dyslexia, despite the fact that it is often still required by many schools in order for services to occur. The traditional discrepancy model used to diagnose a learning disability does not indicate the reason for the disability, although it may help to rule out other causes. Yet, IQ testing, even if provided free by the school system, can delay a diagnosis and, therefore, needed interventions.

## **The Role of the School Nurse**

Ridley (2011) found that nurses in general had a lack of understanding of dyslexia, but when they were more knowledgeable, they were more likely to provide meaningful support to those with dyslexia. The school nurse might be the first line of defense in identifying a child with

dyslexia because most teachers are unaware of the warning signs, and some do not believe that it exists. Washburn, Joshi, and Brinks-Cantrell (2011) found that teachers tended to hold the common misconception that dyslexia is a visual disorder, rather than a phonological problem. Furthermore, the teachers admitted that dyslexia awareness was not a part of their formal training. As a result, struggling readers may not be receiving research-based instructional methods by teachers who are aware of the best practices for students with dyslexia.

In addition to working with the child, it is imperative that the school nurse provide support to the parents, who may be frustrated and unsure of what they should do to help their children. Parents may also feel more comfortable sharing their concerns with someone other than their child's teacher, who may feel that the parents are criticizing the teacher's instructional strategies. Some teachers tell parents to wait when concerns about learning difficulties are expressed, saying that it's too early to intervene. The "wait and see" approach is not advised if dyslexia is suspected. Researchers have shown that not only is early identification possible, but it is necessary to ensure later academic success (Hellen, Plante, & Hugdahl, 2011). Screening tools are available and have proven to be good indicators of dyslexia in children as young as 5 years old (Hellen et al., 2011; Wilson & Lonigan, 2009).

It is important for school nurses to find out approaches that parents have already tried with their children. For example, have the parents consulted an outside resource, such as a psychologist, reading specialist, or physician? Or, parents might have been tempted to try a treatment method that is costly but ineffective. Unfortunately, Internet searches will reveal many products that claim to "cure" dyslexia. Bull (2009) found that parents had used several alternative treatment methods for their children with dyslexia, including nutritional supplements and special diets, homeopathy, and chiropractic manipulation. Nurses should be aware of this in order to provide parents with evidence-based advice to guide their decisions.

Finally, school nurses need to be aware of the laws in their state to effectively advocate for children with dyslexia and their families. Some states have passed laws aimed at early identification and treatment of children with dyslexia, but many states have no laws in place that are specific to dyslexia (Youman & Mather, 2013). However, federal guidelines such as the Individuals with Disabilities Education Act (IDEA) are designed to protect students with learning disabilities, and dyslexia is covered under this law. The IDEA ensures that children in public schools receive free testing and special education services, including needed accommodations for learning. One unique aspect of the IDEA that has resulted in a change in identification and treatment for children with learning disabilities is termed Response to Intervention (RTI). RTI has the aim to identify specific learning disabilities, which provides clarity to the IDEA, so that practitioners can implement learner-specific interventions (Fuchs & Fuchs, 2006).

## **Conclusion**

School nurses may feel that issues such as dyslexia are educational issues and not in their scope of practice. However, dyslexia affects the whole child and the family and warrants a holistic treatment plan that includes the school nurse. Armed with the knowledge of what dyslexia is,

school nurses can be effective members of the school team that supports the child through identification and treatment.

## References

Barton, S. (2002). *Bright solutions for dyslexia*. Retrieved from <http://www.dys-add.com/index.html>

Bull, L. (2009). Survey of complementary and alternative therapies used by children with specific learning disabilities (dyslexia). *International Journal of Language and Communication Disorders, 44*(2), 224-235.

Elbro, C., & Jensen, M. (2005). Quality of phonological representations, verbal learning, and phoneme awareness in dyslexic and normal readers. *Scandinavian Journal of Psychology, 46*, 375-384.

Fuchs, D., & Fuchs, L. (2006). Introduction to Response to Intervention: What, why, and how valid is it? *Reading Research Quarterly, 41*(1), 93-99.

Hellen, T., Plante, E., & Hugdahl, K. (2011). Predicting dyslexia at age 11 from a risk index questionnaire at age 5. *Dyslexia, 17*, 207-226.

International Dyslexia Association. (2012). *Dyslexia basics*. Retrieved from <http://www.interdys.org/>

McBride-Chang, C., Lam, F., Lam, C., Chan, B., Fong, C. Y., Wong, T. T., & Wong, S. W. (2011). Early predictors of dyslexia in Chinese children: Familial history of dyslexia, language delay, and cognitive profiles. *The Journal of Child Psychology and Psychiatry, 52*(2), 204-211.

Peterson, R., & Pennington, B. (2012). Developmental dyslexia. *The Lancet, 379*, 1997-2007.

Ridley, C. (2011). The experiences of nursing students with dyslexia. *Nursing Standard, 25*(24), 35-42.

Siegel, L. S. (2006). Perspectives on dyslexia. *Paediatric Child Health, 11*(9), 581-587.

Tops, W., Callens, M., Lammertyn, J., Van Hess, V., & Brysbaest, M. (2012). Identifying students with dyslexia in higher education. *Annals of Dyslexia, 62*, 186-203.

University of Michigan. (n.d.). *Dyslexia help*. Retrieved from <http://dyslexiahelp.umich.edu>

Washburn, E., Joshi, R., & Brinks-Cantrell, E. (2011). Teacher knowledge of basic language concepts and dyslexia. *Dyslexia, 17*, 165-183.

Wilson, S. & Lonigan, C. (2009). An evaluation of two emergent literacy screening tools for preschool children. *Annals of Dyslexia, 59*: 115-131.

Youman, M., & Mather, N. (2013). Dyslexia laws in the USA. *Annals of Dyslexia*, 63, 133-153.