ADHD: Implications for School Counselors

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Attention-Deficit/Hyperactivity Disorder (ADHD) is the most commonly diagnosed emotional/behavioral health disorder in children (Substance Abuse and Mental Health Services Administration [SAMHSA], 2012). As the rates of ADHD diagnosis rise, so will the likelihood that school counselors will be called upon to work with parents, teachers, and other educational professionals to assist children with ADHD (CWA) successfully negotiate their academic lives. Although the majority of CWA are served within the general education classroom, these children will often continue to face academic, social, and behavioral difficulties both in and out of the classroom (Webb & Myrick, 2006). Children with ADHD often

require academic tutoring outside of the classroom setting and are at-risk for repeating grades or eventually dropping out of school (Webb & Myrick, 2006). Children with ADHD are also at-risk for developing additional emotional/behavioral problems (e.g., depression, anxiety), which can compound difficulties they face due to their ADHD. School counselors can provide a myriad of resources (e.g., individual counseling, consultation services) to support teachers and students with ADHD to achieve a successful academic experience. The American School Counselor Association (ASCA) holds the position that school counselors serve as advocates for students with special needs by working with families to involve them with their

Abstract

The focus of this article is to provide an overview of the current state of knowledge of ADHD and to provide evidence-based training interventions for school counselors. An overview of basic information about ADHD will be provided, including diagnosis, presentation, causes, prevalence, and common misconceptions. Evidence-based training interventions will provide information to school counselor for working with children with ADHD in the educational setting.

Keywords: ADHD, school counselors

children's education and by collaborating with other educational professionals with the end goal of promoting academic achievement for all students (ASCA, 2013). School counselors are able to help all students, including students with ADHD, realize their potentials to assist them in achieving academic success, regardless of challenges they may face. The purpose of this paper is to provide resources to assist school counselors in effectively assisting students with ADHD by providing an overview of the current knowledge about ADHD as well as evidence-based training interventions for use with students with ADHD in the academic setting.

ADHD in Children: Overview

Attention-Deficit/Hyperactivity is a neurodevelopmental disorder in which a child displays persistent, significant problems with inattention and/or hyperactivity-impulsivity (American Psychiatric Association [APA], 2013; US Department of Education [USDOE], 2008). Although all children will display inattentive, hyperactive and impulsive behaviors, for CWA, these core behaviors of ADHD will be more severe and will occur with greater frequency than for children without ADHD (National Institute of Mental Health [NIMH], n.d.). According to the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM 5), to be diagnosed with ADHD a child must have symptoms a minimum of six months prior to diagnosis and those symptoms must have been present prior to 12 years of age (APA, 2013). Additionally, the inattentive and/or hyperactive/impulsive symptoms must cause a negative impact in significant areas of functioning (e.g., social, academic, occupational). Children must also experience difficulties in more than one setting (e.g., home and school) to ensure that the problem is one of attention and/or hyperactivity/impulsivity, rather than one of environment (APA, 2013).

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Symptoms of ADHD

Although inattention, hyperactivity, and impulsivity are the core set of symptoms used to describe ADHD, symptom presentation in those diagnosed with ADHD will vary. Depending on a child's symptoms, he or she will be diagnosed with one of three types, or presentations, of ADHD: combined, predominantly inattentive, or predominately hyperactive/impulsive (APA, 2013). With the predominantly inattentive presentation, a child displays symptoms of inattention but not of hyperactivity or impulsivity. Common symptoms of inattention include not giving close attention to details, making careless mistakes in work, not appearing to listen when spoken to directly, difficulty organizing oneself, forgetfulness, and avoiding arduous mental tasks (APA, 2013). The difficulties with attention CWA experience can cause them numerous difficulties in the classroom including problems sustaining attention during an entire task, attending to details in directions, and misplacing items necessary for task completion (USDOE, 2008). Problems with inattention, although problematic to academic performance, tend to be less disruptive to the classroom setting that hyperactivity and impulsivity (Webb & Myric, 2006). Children with the inattentive presentation can be overlooked because they are less disruptive and less likely to act out in the classroom (NIMH, n.d.). Also, children with this diagnosis may not experience difficulties with interpersonal relationships, as compared to children with the hyperactive/impulsive or combined presentations (NIMH, n.d.).

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In the predominantly hyperactive/impulsive presentation of ADHD, a child displays symptoms of hyperactivity or impulsivity, but not of inattention (APA, 2013). Hyperactive and impulsive behaviors may include being fidgety, difficulty playing or engaging in leisure activities quietly, talking excessively, interrupting others, difficulty awaiting one's turn, being excessively active, and leaving one's seat when not appropriate (APA, 2013). Hyperactive and impulsive behaviors can affect not

only academic performance, but a CWA's interpersonal relationships as well. Often, children with this presentation of ADHD are viewed as aggressive and disruptive to other children and educational staff. This in turn may result in problems with peers and with violation of school behavioral rules requiring discipline by school officials (Webb & Myric, 2006). Impulsive behaviors in particular are implicated in behaviors that cause the CWA to have conflict with educational staff and their peers (Webb & Myric, 2006).

In the combined presentation of ADHD, children will display problematic behaviors with both inattention and hyperactivity/impulsivity (APA, 2013). Children with this presentation will face the challenges that accompany difficulties with attention as well as with hyperactivity and impulsivity. The combined presentation is the most common (NIMH, n.d.) and therefore the one with which school counselors are most likely to work. As with the hyperactive/impulsive presentation, school counselors may be called upon to assist with students with the combined presentation due to the disruptive nature of the symptoms. A common goal is to help CWA successfully manage their classroom behavior and to interact appropriately with peers and teachers.

Prevalence of ADHD

Although the onset of ADHD for most children is prior to age four, ADHD is most often diagnosed when a child is in elementary school (McKinney, Montague, & Honeycutt, 1993). This is when children are first introduced to the structure and demands of the educational system, and when problematic behaviors become evident. School counselors will likely be called upon to work with students with ADHD more and more, as rates of diagnosis have steadily increased over time, at

an average rate of 5% per year (Centers for Disease Control [CDC], 2011). Between the ages of 4 to 17 years, the prevalence of ADHD in boys is estimated to be 12.1% and in girls, 5.5% (CDC, 2013), with males consistently diagnosed at higher rates than females, at a ratio of about 2:1 (Bloom & Cohen, 2007). The average age at which children are diagnosed with ADHD is 6.2 years (CDC, 2013), however the greater the severity of the disorder, the earlier it tends to be diagnosed.



Associated Features of ADHD

Children with ADHD often demonstrate difficulties with the organization of their behaviors as well as adjusting to environmental demands (Mercugliano, Power & Blum, 1999). This often translates to problems with day-to-day functioning such as having all materials needed for the day, appropriate peer interactions, completing homework, and being on time. Often, CWA display inconsistent performance in school, lower test scores, and behavioral problems. These difficulties often will be those that prompt requests for help from the school counselor (DuPaul & Stoner, 2002a; Reeve, 1990; Zentall, 1993).

Children with ADHD are also at-risk for emotional, social, behavioral, and academic disorders. When compared to children without ADHD, CWA are significantly more likely to have comorbid depression, anxiety, learning disabilities and childhood ADHD (Howe, 2010; Larson, Russ, Kahn, & Halfon, 2011). In one study, researchers examined parental reports of comorbidity in their CWA. Of these children, 46% of were reported to have a learning disability, 27% a conduct disorder, 14% depression, and 12% a speech-language problem. In comparison, 5% of children without ADHD were reported to have a learning disability, 2% a conduct problem, 2% an anxiety problem, 1% depression, and 3% speech problems (Larson, et

al., 2011). Sixty-seven percent of the children with ADHD had a minimum of one comorbid disorder (Larson, et al., 2011). These findings suggest that children with ADHD will likely face significant challenges in addition to ADHD, which could affect school and home life, and engender frustration and anxiety for parents and teachers in addition to the children themselves.

Causes of ADHD

Genetics

The specific causes of ADHD are not known; however, in the past decades, research has attempted to determine factors that contribute to the development of ADHD. One factor is genetic inheritance. Similar to other psychological disorders, ADHD run in families. Heritability estimates of ADHD range from 71 - 90% (e.g., Frank-Biggs, 2011; Lichtenstein, Carlstrom, Rastam, Gillberg, Anckarsater,

2010; Thapar, Cooper, Eyre, & Langley, 2013). Studies suggest that first degree relatives are two to eight times more likely to have ADHD than relatives of unaffected individuals. Adoption studies also support that ADHD has a high

heritability rate (Thapar, et al., 2013). It is important to note that, no matter what psychiatric condition, the effects of environment as they interact with an individual's genetics can never be discounted.

Other studies have addressed the role of genes and their role in the transportation and use of dopamine, which has been implicated in ADHD (Franks-Biggs, 2011). Dopamine is a neurotransmitter that affects the movement of the body as well as reward and pleasure-seeking behaviors (Comer, 2013). Changes in mood, increased motor behavior, and frontal lobe dysfunction have been linked to excessive dopamine (Howe, 2010).

Brain Structure

Research also suggests that the structure and function of the brains of children with

ADHD differ from those without ADHD (e.g., Krain & Castellanos, 2006). Children with ADHD have been found to have lower brain volume in several parts of the brain including the prefrontal regions and cerebellum (Krain & Castellanos, 2006). The prefrontal area of the brain is responsible for, among other things, executive function. Executive function is an umbrella term that refers to a set of mental processes which include attention to stimuli, spatial skills, planning, organizing, and strategizing (Comer, 2013). Dysfunction in the prefrontal lobe has been hypothesized to affective executive functioning, and be reflected in the inattentive, hyperactive, and impulsive symptoms of ADHD (Comer, 2013).

Environmental Risks

Although many environmental factors have been associated with increased risk of ADHD, causality is difficult to identify. Most studies assessing environmental risk factors have focused on toxins, diet, psychosocial factors and prenatal and perinatal factors. Risk factors associated with the prenatal and perinatal periods are myriad.

Among the commonly identified factors are prenatal exposure to alcohol, drugs, and tobacco smoke (Thapar et al., 2013). Stress during pregnancy has also been identified as a risk factor for ADHD, as has prematurity and low birth weight. The inattentive presentation of ADHD has especially been associated with low birth weight and prematurity (Thapar et. al., 2013).

Exposure to toxins both pre- and post-natal periods have also been linked to ADHD. Lead, pesticides, and toxic industrial products (TIP) are among the environmental toxins most heavily studied for their impact on the disorder. Lead has been thought

to affect the cognitive development and functioning of individuals exposed to it, especially when ingested. These effects include lower cognitive ability as well as areas such as mental alertness and flexibility of cognitive functions (Frank-Briggs, 2011).

Psychosocial Factors

The psychosocial factors that are believed to place a child at-risk for ADHD include poverty, family dysfunction, family adversity, and severe and early deprivation (Howe, 2010). Maltreatment at the hands of family has also been identified as placing a child at-risk for ADHD. One difficulty in addressing clearly the relationship between psychosocial factors and ADHD is whether the factors are a cause or a result (or both) of ADHD. Genetic factors (e.g., running in the family) can confound attempts at determining such a relationship, as can shared environment. Of the psychosocial factors commonly addressed, early deprivation appears to more clearly place a child at-risk for ADHD. No definitive evidence exists about the causal nature of psychosocial factors, but it is likely that these factors serve to modify its expression and outcomes (Howe, 2010).

Misconceptions of ADHD

Although much is known about what is associated with ADHD, many misconceptions about the disorder exist. These misconceptions are potentially damaging and can prevent teachers, parents, and counselors from providing the adequate support needed for CWA in the educational setting. Next, we will briefly review some common misconceptions school counselors may hear

ADHD Only Affects Children

One of the most common misconceptions about ADHD is that it is only a disorder of childhood and will be outgrown. Although ADHD is a disorder that has its genesis in childhood, it is a chronic and pervasive disorder that continues for many into adulthood (APA, 2013). Similar to children or adolescents diagnosed with ADHD, adults will seem (or feel) restless, inattentive, and unable to focus or

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accomplish tasks in a timely manner (APA, 2013). An analysis of the academic, social, and behavioral history of adults often reveals long-standing difficulties with organization, productivity and focus.

Medications Cure ADHD

Another common misconception about ADHD is that pharmacological treatment will eliminate all problematic inattentive, hyperactive and impulsive symptoms. Pharmacological treatment of ADHD has an extensive history, with reports of medication being used to treat the disorder since at least 1937 (Lange, Reichel, Lange, Tucha, & Tucha, 2010). The most common medications that are used for individuals diagnosed with ADHD are methylphenidate, dexaphetamine, atmoxetine, and lisdexamphetamine (Laver-Bradbury, 2013) with methylphenidate being the most commonly prescribed ADHD (Spiller, Hays, & Aleguas, 2013).

Pharmacological treatments for ADHD often focus on the function of the frontal lobe. In those with ADHD, the prefrontal cortex is hypothesized to be underaroused, resulting in difficulties with attention, impaired memory, difficulty with focus, and executive functioning (Comer, 2013). Pharmacological treatments work by stimulating the prefrontal cortex to an optimal level for cognitive efficiency, similar to those without ADHD (Berridge et al., 2006).

Stimulant medications also work by affecting the function of the use and transmission of dopamine and norepinephrine (Berridge et al., 2006). Dopamine and norepinephrine affect, in part, an individual's executive functioning including

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decision-making, problem-solving, planning, and organization (Swanson, Baler, & Volkow, 2010). Medications do not cure ADHD, but it makes it easier for the individual to function similarly to those without ADHD.

ADHD is Over Diagnosed

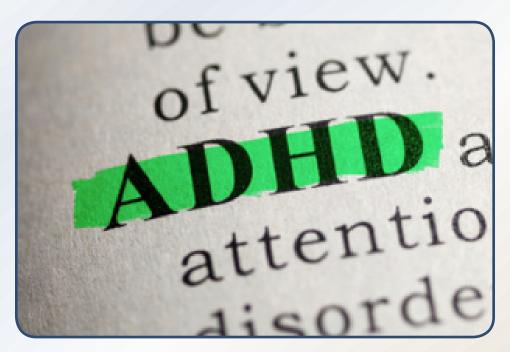
Within the past ten years, there has been a noticeable increase in ADHD diagnoses. Between the years of 2003 and 2011, ADHD diagnoses have increased by a total of 42% (CDC, 2013). Although incident rates of ADHD have increased, it is unlikely that the increase is due to wide-scale misdiagnosing by health care providers. Instead, the increase in diagnoses is likely due to a better understanding of ADHD, which in turn produces a greater awareness in clinicians and the lay population. As knowledge of ADHD increases, the prevalence rates will likely follow suit, as will the ability to provide effective support and treatment both inside and outside of the classroom.

Medication Causes Substance Abuse

One topic that engenders significant discussion is whether children who take ADHD are more at-risk to abuse substances later in life (Miller, 2011). Although stimulant medication used to treat ADHD can make a significant difference in cognitive and behavioral functions (especially when accompanied by psychotherapy), research demonstrates that children and teens diagnosed with ADHD are at a higher risk for developing a substance abuse problem in the future (American Academy of Pediatrics [AAP], 2011). Although the relationship between use of psychopharmacological treatments for ADHD and later substance abuse is robust, it is unlikely that the medications themselves are causal factors in later abuse (AAP, 2011). A number of factors have been proposed to explain the relationship, such a genetic predisposition to substance abuse, use of substance to self-medicate issues secondary to ADHD, and poor judgment skills which often accompanies ADHD (AAP, 2011).

Dietary Implications

The idea that the diets of CWA as contributing to the development and maintenance of ADHD has long been a topic of discussion. In particular, hyperactive and impulsive symptoms associated with ADHD have been (erroneously) linked to overconsumption of sugar. However, in controlled studies regarding the link between sugar and behavior, researchers have found that the amount of sugar had no effect on whether a child was able to concentrate or behave appropriately (AAP, 2011). Studies such as these effectively ruled out a link between sugar and unwanted



behavior such as hyperactivity (AAP, 2011). A recent addition to the discussion of the impact of diet on CWA involves gluten. The focus of gluten on ADHD symptoms has spawned a body of research focusing on the impact of gluten on ADHD. However, only limited evidence exists that gluten is culpable in the development of ADHD, and only to a limited degree (e.g., Niederhofer, 2011).

ADHD: Next Steps for the School Counselor

Having a solid understanding of what ADHD is, how it manifests, its prevalence, its causes, and other related factors is important for school counselors. With this knowledge, school counselors will more effectively be able to provide support for educational persons and parents in assisting CWA. Next we discuss taking this knowledge and implementing it within the school setting, focusing on evidence-based interventions.

Evidenced-Based Training Interventions

In order to address the symptoms of those with ADHD, evidence-based interventions can be used to support a person coping with ADHD. Evidence-based interventions can also be used with or without the use of medication-based

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strategies. These interventions take place outside the environment where change is desired. The child is trained in specific strategies and the child will implement the training in environments where the behavior needs to be changed. Evidenced-based interventions include small group counseling, mindfulness training, check-in/check-out, and cognitive problem solving. Small group counseling can help students with ADHD a vehicle to help them understand ADHD, enhance learning skills, and recognize external cues (Webb & Myrick, 2006). Small group counseling has also been used to teach cognitive problem solving to children with ADHD (Ozcan, Oflaz, Turkbay, & Freeman Clevenger, 2013). Mindfulness training teaches the student to control their attention and reduce automatic responses. Mindfulness training can be tailored to the specific behavior problems students are experiencing (van de Weijer-Bergsma, Langenberg, Brandsma, Oort, & Bogels, 2014). Check-in/check-out can be used with a variety of problematic behaviors such as inattention, off-task behaviors, and homework completion. In order to be effective, all components of the check-in/checkout process need to be implemented (Swoszowski, 2014).

Teacher Training

School counselors can provide teachers with strategies similar to those taught to parents to increase appropriate behavior in the classroom. Providing teachers with evidenced-based classroom management strategies assists the teacher in helping a child with ADHD manage their behavior in the classroom environment. Token systems and response cost systems are evidenced-based practices that are effective with children who have ADHD. Token systems that reward positive behavior

by noticing when the child is engaging in appropriate behavior are an effective evidence-based practice for children with ADHD. A response cost system that gives the child a specific number of points at the beginning of the day and takes points away for negative behavior then rewards the child at the end of the day was found to be an effective way to manage behavior in the classroom (Brock, Grove, & Searls, 2010).

School counselors can conduct teacher-training sessions that indicate how to set up a tangible reward system and/or a response cost system that provides a means for the teacher to give rewards to the child for appropriate behaviors and take points away when the child engages in negative behavior. Training teachers in time-out strategies that do not reinforce the negative behavior is another way that school counselors can assist teachers in helping children with ADHD manage their behavior. Self-management systems have also been found to be effective in assisting children with ADHD. The school counselor works with the teacher to develop a system that allows the student to monitor and evaluate their own behavior reducing the amount of feedback needed from the teacher. Both teacher and student rate the student's behavior. The ratings are compared and points are awarded if the ratings are the same. Students then receive rewards once a certain point level is reached (DuPaul & Stoner, 2002b). The Daily Report Card is a strategy that requires both teacher and parent involvement. The school counselor can work with the teacher to develop small goals for the student to meet and with parents to determine appropriate rewards. As the goals are met, the parent provides the student with the assigned reward (Chronis, Jones, & Raggi, 2006).

Conclusion

Children with ADHD face a myriad of difficulties within the educational setting. Parents and teachers alike may struggle in providing effective assistance to allow these children to succeed. The school counselor possesses a unique skill set which allows counselors to provide support and advocacy for CWA as well as for those who work with CWA. As our knowledge of ADHD grows, it is to be hoped that so too will the school counselor's ability to provide effective, evidence-based interventions to assist all who are affected by ADHD.

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Counseling Immigrant Students in the Schools

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Abstract

According to the 2010 United States Census, one out of every five children live in an immigrant family with either one or both parents being immigrants. This paper will explore the unique needs of children of immigrants who come to school as immigrant students. A discussion of the use of Reality Therapy as a counseling approach with this population is illustrated. Appropriate counseling techniques addressing immigrant students; academic, career and personal/social needs are addressed. A detailed classroom guidance related to the topic is included in the Appendix.

Keywords: immigrant students, reality therapy, school counselors, classroom guidance

The population known as immigrant students is not limited; rather, any student who has come to the United States from a different country can be considered an immigrant. Therefore, when an immigrant student arrives within the school system, school counselors need to consider the individual's personal background before making any decisions about how to conduct counseling sessions and what techniques will be the most beneficial to that particular student.

The following paper gives general information regarding the immigrant student population. However, it is very important to remember that each student, immigrant or not, deserves individual attention without being categorized into a group. The characteristics described below are some which are commonly found among Hispanic, European, and Asian cultures.