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PEDIATRICIAN/PSYCHOLOGIST COLLABORATION IN THE DIAGNOSIS AND TREATMENT OF CHILDREN WITH ADHD

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In the United States, the shortage of psychiatrists is increasing, and patients who need psychotropic medications often face long wait times and limited services. To fill the widening gap between supply and demand, prescribers trained outside of traditional medical settings are stepping in. Although psychologists traditionally had little medical background, a new generation of psychologists now receives extensive training in the use of psychotropic medications, and two states and one US territory have already enacted laws that grant properly trained psychologists prescriptive privileges. As psychologists increasingly pursue medical training, they become a valuable resource for pediatricians who are often called upon to treat childhood psychological disorders in addition to medical problems. Psychologists can be especially helpful to pediatricians grappling with the need to properly diagnose and treat children with attention-deficit hyperactive disorder, the most commonly diagnosed psychological disorder in childhood. This paper outlines the benefits to pediatricians, psychologists and the patient population when a collaborative relationship between pediatrician and pediatric psychologist is utilized to diagnose and treat children with this disorder.

Key words: *Pediatrician-Psycholigist collaboration, ADHD, prescriptive authority*

En los Estados Unidos, está aumentando la carencia de psiquiatras, y pacientes con necesidad de medicación psicotrópica a menudo se enfrentan a largas esperas y servicios limitados. Para disminuir la brecha creciente entre la oferta y la demanda, están incorporándose personas con capacidad para prescribir, formadas fuera de los escenarios médicos tradicionales. A pesar de que tradicionalmente los psicólogos han tenido poca formación médica, una nueva generación de psicólogos recibe ahora una exhaustiva formación en el uso de medicación psicotrópica, y dos Estados y un territorio de Estados Unidos ya han promulgado leyes que otorgan privilegios prescriptivos a psicólogos preparados. A medida que los psicólogos buscan formación médica, se convierten en un valioso recurso para los pediatras que a menudo son llamados para tratar trastornos psicológicos infantiles, además de problemas médicos. Los psicólogos pueden ser especialmente útiles para los pediatras que se enfrentan con la necesidad de diagnosticar y tratar adecuadamente a niños con el trastorno por déficit de atención e hiperactividad, el trastorno psicológico más comúnmente diagnosticado en la infancia. Este trabajo resume los beneficios obtenidos para los pediatras, psicólogos y pacientes cuando se utiliza una relación de colaboración entre pediatras y psicólogos infantiles para el diagnóstico y tratamiento de niños con este trastorno.

Palabras clave: *Colaboración Pediatra-Psicólogo, TDAH, capacidad para prescribir.*

In the United States, the use of medications to treat psychological disorders is prevalent. While some argue that this is the result of the American society's efforts to find a "quick fix," most health professionals recognize that many emotional disorders involve significant biological factors. Thus, treatment of these disorders often necessitates the use of medications.

AVAILABILITY OF MEDICAL SERVICES

In the US, the shortage of psychiatrists is becoming increasingly apparent (Goldman, 2001). Consequently, patients in need of psychiatric services face long wait-times for initial appointments. In addition, most Americans are covered by insurance plans that utilize specialized companies to review the medical necessity for services and act as gate-keepers to prevent overuse of specialists. Because treatment by medical specialists (including psychiatrists) is deemed more expensive than treatment by primary doctors, managed care gate-keepers discourage family physicians from utilizing specialists. Each primary doctor's rate of specialist referrals is monitored, and those doctors who exceed the expected quotas are dropped from the provider panels. As a result, family doctors are pressured to treat a wide variety of medical conditions, including psychiatric problems. Instead of utilizing psychiatrists, American family doctors take it upon themselves to prescribe and

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monitor psychotropic medications, and in the US more than two-thirds of all psychotropic medications are prescribed by non-psychiatrist physicians.

Most family doctors, however, have little background in psychology or psychiatry and know little about psychotropics, and the disorders for which they are intended. This dilemma is particularly commonplace in the treatment of children. Pediatric psychiatrists and neurologists are in short supply and have waiting lists that exceed those of their adult counterparts. Thus, most psychotropic medications are prescribed to children by their pediatricians. As an example, psychostimulants, commonly used to treat the symptoms of attention-deficit hyperactivity disorder (ADHD), are the most often prescribed category of psychotropic medications used with children (Olfson, et al., 2002). Pediatricians most frequently prescribe these medications, although many do not have extensive knowledge about the pathophysiology and treatment of ADHD.

BENEFITS OF PEDIATRICIAN/PSYCHOLOGIST COLLABORATION

Because of their busy schedules, pediatricians spend a limited amount of time with each patient and cannot perform in-depth reviews of personal, family, developmental, health, and social history necessary for proper diagnosis of most psychological disorders. Conversely, psychologists are specifically trained in the diagnosis and treatment of mental disorders and traditionally see patients for one-hour appointments, usually weekly or bi-weekly. Thus, pediatricians can benefit from collaborative relationships with pediatric psychologists who can assist them in diagnosing and planning a comprehensive treatment of children who exhibit psychological disorders.

When children are placed on medications, pediatricians need to monitor the patients' progress and side effects. Many pediatricians, however, are not conversant with dose-response profiles and side effects of psychotropics. In addition, pediatricians may not be able to see their patients frequently enough, and long enough during each visit, to accurately screen these issues. Consequently, opportunities exist for properly trained psychologists to assist pediatricians with these tasks.

A collaborative relationship between a pediatric psychologist and a pediatrician will be most helpful to the pediatrician when the psychologist is intimately familiar with medical terminology and concepts, and the proper use of psychotropics (dosages and response profiles, side effects, etc.). Those psychologists who seek opportunities for such collaborative relationships need to obtain appropriate medical raining in order to become proficient in those areas.

ADHD is the most commonly diagnosed psychological disorder in the pediatric population (American Psychiatric Association, 2000). Consequently, the collaborative model advocated herein is especially applicable to the joint psychological/pediatric assessment and treatment of this disorder, and psychologist who are familiar with the psychological and medical treatment of ADHD are likely to be especially welcome by pediatricians.

ASSESSMENT

In order to properly diagnose ADHD, the child's developmental, behavioral, school, medical and social history must thoroughly be reviewed. In addition, objective rating scales should also be utilized to provide an objective rating of the severity of the symptoms. Pediatricians commonly utilize a brief interview with a parent (typically, the mother), and a brief observation of the child. Some also use a rating scale. While these methods may sufficient in some cases, many children present with a complex pattern of symptoms that require a more in-depth approach, and brief interviews and observations may be insufficient to perform an appropriate differential diagnosis. Psychologists are generally better able to perform such comprehensive evaluations to clarify the diagnosis.

Some disorders mimic the symptoms of ADHD. For example, children or adolescents presenting symptoms of agitation may also appear to be distractible, fidgety, and exhibit both poor control of emotional discharges and poor performance in school, all symptoms frequently seen in children with ADHD. Such young patients may be misdiagnosed with ADHD, whereas a mood disorder may be the accurate diagnosis. Of all mood disorders, children with bipolar disorders are especially likely to initially be diagnosed with ADHD (Bowring & Kovacs, 1992). The presentation of pediatric bipolar disorder often significantly resembles ADHD symptoms, with high activity level, impulsivity, distractibility, and poor judgment. Many children with bipolar disorder who are initially diagnosed with ADHD get worse when a treatment with psychostimulants is attempted (Biederman, 1998). An experienced psychologist may recognize that such children typically present with greater magnitude of

mood swings, sleep disturbance, and explosiveness, and will be invaluable to a pediatrician in clarifying the diagnosis.

About 70 percent of children with ADHD respond positively to stimulant medications (Jadad, et al., 1999; Spencer, et al., 1996), while about 30 percent do not. Children with comorbid conditions are especially likely to have a poor response to psychostimulants. Studies suggest that about one-fifth of children with ADHD have a comorbid depressive disorder (Biederman, et al, 1991). These disorders are easy to miss at first glance, as emotional disregulation and agitation are often attributed to ADHD. However, such symptoms may signal a depressive disorder and require a different approach to treatment. When a child presents with a comorbid ADHD and depression, the use of psychostimulants may not be a preferred first-line treatment. Studies have shown that some antidepressants exhibit efficacy rates for ADHD similar to those of psychostimulants, while concurrently addressing the symptoms of depression. Tricyclic antidepressants have historically been known to improve ADHD symptoms (Higgins, 1999). However, the side-effect profiles of these medications (iincluding, weight gain, sedation and possible cardiac problems) are often difficult to tolerate. Newer antidepressants, including buproprion (Conners, et al, 1996) and a newly approved compound atomoxetine (Kratochvil, et al., 2002), have shown efficacy in the treatment of both ADHD and depression with more favorable side effect profiles. When a psychologist determines that a child is exhibiting symptoms of ADHD and depression, he or she can assist the pediatrician in selecting a medication (or a combination thereof) that is more likely to be effective in addressing all of the symptoms.

Similarly, about one-sixth of children with ADHD present with a comorbid anxiety disorder (Newcorn, et al., 2001). Childhood fears and sleep problems, common with anxiety disorders, may be attributed to ADHD symptoms, or normal childhood variation. Yet, ADHD children who present with tendencies toward fear, anxiety, and obsessive behavior, are often very difficult to properly medicate. Psychostimulants exert their psychotropic effect by increasing the activity in the dopaminergic, and to a lesser extent, noradrenergic, pathways. Increasing the availability of these neurotransmitters may exacerbate the symptoms of fear, anxiety, and obsessive behaviors. Consequently, psychostimulants are not the best first-line medications to use with anxious or obsessive ADHD children. Instead, modafinil, an atypical stimulant, may be a good choice. Similarly, alpha-2 adrenergic agonists, such as clonidine or guanfacine, have also been shown to improve ADHD symptoms without increasing anxiety (Connor, et al, 1999). Psychologists can help pediatricians become more aware of the child's comorbid anxiety symptoms and influence the decision about which medication may be the best choice.

A child with comorbid ADHD and a tic disorder also warrants discussion. For many years, conventional wisdom has been that psychostimulants may exacerbate tics. Thus, any ADHD child with a comorbid history of tic behaviors was not a candidate for stimulants. Recent research has shown that this approach may be erroneous. The comorbidity between Tourette's Disorder (TD) and ADHD is significant, with more than 50 percent of children with TD suffering comorbid ADHD (American Psychiatric Association, 2000). Both disorders are likely due to dopamine transporter gene anomalies. Several studies have shown that children with TD and ADHD do respond to stimulant medications (e.g., Gadow, et al., 1995). When stimulants are used, both the ADHD and TD symptoms diminish. So, a pediatric psychologist may help a pediatrician decide that a trial of stimulant medications may be warranted in children with ADHD and comorbid tic disorders.

TREATMENT

Some parents are resistant to on-going mental health treatment. The reasons for this are complex. Limited medical coverage is one of the determining factors. In the United States, many families do not have the financial means or adequate insurance coverage to afford prolonged mental health care. Consequently, pediatricians may be reluctant to refer children to psychologists. However, parents are more receptive of a referral for a two-session consultation when it is clear that the purpose is to clarify the diagnosis. I have had much success with an approach where the first session is spent with the parents alone to review the description of symptoms and relevant personal, family, school, health and social history. The second session includes an interview/observation of the child. Between the sessions, parents fill out behavioral rating scales, such as the Conners Rating Scales (Conners, 1998), or Barkley's Home/School Situations Questionnaires (Barkley & Murphy, 2006). This evaluation can be performed within two weeks of the pediatrician's referral and allows the physician and parents to receive timely feedback about

the diagnosis and available treatment choices. Many pediatricians who refer children for an evaluation with a pediatric neurologist currently use this referral model. Pediatric psychologists familiar with medical and psychopharmacological issues can also be a viable referral choice for these pediatricians. A two-session evaluation with a pediatric psychologist is likely to be similar in cost to a neurological evaluation and can usually be performed more expeditiously because, in the United States, most psychologists do not have wait times as long as pediatric neurologists.

In other cases, parents seek to avoid medicating their children. Some parents feel that medical professionals overuse medications and are not receptive of non-medical treatments. Those parents seek alternative treatment approaches when they learn that their child exhibits symptoms of a disorder, such as ADHD. In those cases, pediatricians will also benefit from a referral to a medically-trained pediatric psychologist. The pediatrician can be assured that the psychologist is able to objectively determine whether medications are undeniably needed to treat the symptoms. In cases where treatment without medications is not likely to produce much benefit, parents may be more receptive to receiving such feedback from a non-medical professional, and may become more amenable to the need to return to the pediatrician to seek the necessary medications. On the other hand, in those cases where medications may not be absolutely necessary and utilizing non-medical options (for example, behavior modification) is a reasonable alternative, a psychologist can deliver such a service and monitor the child's progress. If the child responds sufficiently, the family received the necessary service and unneeded use of medications was avoided. If the response was insufficient, a referral for medications can be made along the way.

OUTREACH TO PEDIATRICIANS

Many pediatricians are not aware that some psychologists possess significant background in psychopharmacology. Traditionally, American psychologists have not received extensive training in medicine and the use of psychotropics, and many were generally critical of the use of psychotropic medications. Over the past two decades, however, more psychologists have been pursuing extensive training in psychopharmacology. Recently, two states (New Mexico and Louisiana) and one US territory (Guam) passed legislation allowing properly trained psychologists to prescribe psychotropic medications. Efforts continue in many other states to pass similar legislation, and hundreds of psychologists throughout the United States completed extensive medical training.

To educate physicians that some psychologists have sufficient background and training to contribute to decisions about medical treatments, significant outreach efforts are necessary. Psychologists need to communicate to physicians that (where appropriate) they are not only receptive to the use of medications, but also are competent in selecting, dosing and monitoring the use of psychotropics. Those psychologists who possess such a background in psychopharmacology, and are willing to perform focused, time-limited services, will complement pediatrician's services, and most pediatricians are likely to be comfortable jointly treating patients with such psychologists. A collaborative professional relationship between a pediatrician and a pediatric psychologist will be rewarding for both professionals, and will allow patients to receive efficient, efficacious and cost-effective services. Treating children with ADHD is an area where such a collaborative relationship is especially needed.

REFERENCES

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders, 4th edition, text revision (DSM-IV-TR).* Washington, DC: Author.

Barkley, R. A., & Murphy, K. R. (2006). *Attention-deficit hyperactivity disorder: A clinical workbook* (3rd ed.). New York: Guilford.

Biederman, J., Newcorn, J., & Sprich, S. (1991). Comorbidity of attention deficit hyperactivity disorder with conduct, depressive, anxiety, and other disorders. *American Journal of Psychiatry, 148,* 564-577.

Biederman, J. (1998). Resolved: Mania is mistaken for ADHD in prepubertal children. *Journal of the American Academy of Child and Adolescent Psychiatry, 37,* 1091-1093.

Bowring, M. A., & Kovacs, M. (1992). Difficulties in diagnosing manic disorders among children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 31,* 611-614.

Conners, C. K., Casat, C. D., & Gualtieri, C. T. (1996). Buproprion hydrochloride in attention deficit disorder with hyperactivity. *Journal of the American Academy of Child and Adolescent Psychiatry, 35,* 1314-1321.

Conners, C. K (1998). Conners rating scales. North Tonawanda, NY: Multi-Health Systems.

Connor, D. F., Fletcher, K. E., & Swanson, J. M. (1999). A meta-analysis of clonidine for symptoms of attention-deficit hyperactivity disorder. *Journal of the American Academy of Child and Adolescent Psychiatry, 38,* 1551-1559.

Gadow, K. D., Sverd, J., Sprafkin, J., Nolan, E. E., & Ezor, S. N. (1995). Efficacy of methylphenidate for attention deficit hyperactivity disorder in children with tic disorder. *Archives of General Psychiatry, 52,* 444-455.

Goldman, W. (2001). Is there a shortage of psychiatrists?, Psychiatric Services, 52, 1587-1589.

Higgins, E. S. (1999). A comparative analysis of antidepressants and stimulants for the treatment of adults with attention-deficit hyperactivity disorder. *Journal of Family Practice, 48,* 15-20.

Jadad, A., Booker, L., & Gould, M. (1999). The treatment of attention-deficit hyperactivity disorder: An annotated bibliography and critical appraisal of published systematic reviews and metaanalyses. *Canadian Journal of Psychiatry, 44,* 1025-1035.

Kratochvil, C. J., Heiligenstein, J. H., Dittmann, R., Spencer, T. J., Biederman, J., Wernicke, J., Newcorn, J. H., Casat, C., Milton, D., & Michelson, D. (2002). Atomoxetine and methylphenidate treatment in children with ADHD: A prospective, randomized, open-label trial. *Journal of the American Academy of Child and Adolescent Psychiatry, 41,* 776-784.

Newcorn, J, H., Halperin, J. M., Jensen, P. S., Abikoff, H. B., Arnold, L. E., Cantwell, D. P., Conners, C. K., Elliott, G. R., Epstein, J. N., Greenhill, L. L., Hechtman, L., Hinshaw, S. P., Hoza, B., Kraemer, H. C., Pelham, W. E., Severe, J. B., Swanson, J. M., Wells, K. C., Wigal, T., & Vitiello, B. (2001). Symptom profiles in children with ADHD: Effects of comorbidity and gender. *Journal of the American Academy of Child and Adolescent Psychiatry, 40,* 137-146.

Olfson, M., Marcus, S. C., Weissman, M. M., & Jensen, P. S. (2002). National trends in the use of psychotropic medications by children. *Journal of the American Academy of Child and Adolescent Psychiatry, 41,* 514-521.

Spencer, T., Biederman, J., Wilens, T., Harding, M., O'Donnell, D., & Griffin, S. (1996). Pharmacotherapy of attention-deficit hyperactivity disorder across the life cycle. *Journal of the American Academy of Child and Adolescent Psychiatry, 35,* 409-432.