

## BEHAVIORAL DISORDERS IN CHILDREN AND ADOLESCENTS A BRIEF OVERVIEW

In the 1980's the American Academy of Pediatrics(AAP) began to discuss "the new morbidities." In the half-century(1930-1980) since the AAP created a separate identity for itself(breaking off from the American Medical Association in 1930)there had been enormous strides in addressing the ravages, morbidities, and mortality of childhood diseases. Many have commented that the development of water purification, mosquito abatement, immunizations, and antibiotics dramatically increased the life expectancy of American children.

The new morbidities included child abuse prevention, substance abuse prevention, teen pregnancy and sexually transmitted disease prevention, and the awareness of significant neurobehavioral disorders in children and adolescence.

In this brief review, I shall comment on attention deficit disorder, autism, and some brief comments on mood disorders(anxiety and depression).

### ATTENTION DEFICIT HYPERACTIVITY DISORDER

In the mid-twentieth century child psychiatrists began to identify a condition they named MBD or minimal brain dysfunction. Characteristic symptoms included: hyperactivity, impulsivity, and distractability. Of great interest to these clinicians was a serendipitous finding that amphetamines actually made these patients less hyperactive and better able to concentrate and complete tasks.

In 2010 this condition is known as attention deficit hyperactivity disorder(ADHD)including several subtypes such as "predominantly inattentive type" and "combined type" etc.

It is felt to affect as many as 6% of the population and is more common in boys than girls by perhaps 5:1 or an even greater ratio. It is also felt to be a lifelong condition although maturation, self-assessment, and early treatment often decrease the impact of ADHD as patients grow older.

Some studies suggest that there is an over-representation of persons(mostly men)in the criminal justice system who could or should have been diagnosed with ADHD. It is perhaps the feature of poor impulse control that contributes to this finding.

On the other hand—and although impossible to prove—some have suggested that individuals including Thomas A. Edison and/or Winston Churchill may have had ADHD.

Edison reportedly required very little sleep and had challenges in school because of probable impulsivity as well as curiosity.

Some have suggested that Churchill required a world at war to engage his hyperactivity and that his chronic use of brandy and spirits may have been partially self-medication.

Often, very bright children do not perform well in a standard classroom until adequate and hopefully accurate diagnosis has taken place and treatment has been initiated.

Contemporary treatments include a group of medications known as psychostimulants including methylphenidate, dextroamphetamine, and other pharmaceuticals. Behavioral interventions include having a consistent space identified for the student to study and to remove—as much as possible—distractions from that space. Younger ADHD patients are encouraged to recall the steps of “stop, look, and listen” when they have been asked to perform a task: “What is it I am supposed to be doing? Am I doing it? Did I understand what I was asked to do or do I need more information?”

The AAP now suggests that parents eliminate any television exposure for children less than two years of age because of the possibility that the nearly universal presence of television has contributed to some children developing limited attention spans.

The symptoms of ADHD generally are supposed to have been present from before the age of six years. However, the “predominantly inattentive type” is often not diagnosed until school demands become more complex in the middle years and beyond.

Diagnosis is essentially subjective and relies on evaluations done in at least two domains—such as the home and the school.

## AUTISTIC SPECTRUM DISORDER

In recent years there has been increasing concern about the incidence and prevalence of autism. This disorder is also more frequent in boys than in girls and in some recent reports may occur in 1:160 children.

Again at mid-twentieth century a Dr. Kanner did describe childhood autism and mistakenly thought it was a childhood form of schizophrenia and was caused by an emotionally-distant parent. . .sometimes referred to as a “refrigerator-mother.” This has been shown to be an erroneous formulation.

Unfortunately, however, there is still much to be learned about autism. Some have speculated that the increasing incidence is actually due to labeling rather than a true increase in incidence. For example, when I was in training in the 1970’s

children with “developmental delay” were frequently identified but only about 15% of them would have identifiable diagnoses—for example Down Syndrome. With the passage of the Individuals with Disabilities Education Act (IDEA) there became a significant need for more specific diagnosis and identification of the type of disability. Genetic research, psychiatric research, and biochemical markers have assisted in permitting medical professionals more tools now in “labeling” or identifying the name of the disability.

High functioning autism is now called Asperger’s Syndrome and these individuals are usually very intelligent but may have somewhat unusual social skills. On the other end of the spectrum may be patients with little to no speech and significant self-stimulation behaviors including rocking back and forth or dangling strings in front of their eyes.

For the last twenty years, some have tried to attribute the increase in autism in the United States to immunizations especially incriminating the MMR or measles, mumps, and rubella vaccine. Others have wondered about vaccine preservatives such as the mercury-containing thimerosal. An article in Lancet in the early 1990’s attributed autism to these things and study after study in the last twenty years has not duplicated the allegations. Recently (2010) Lancet has withdrawn the article and disclosed that the British physician who published it had been in the employ of plaintiff attorneys. He has been discredited as well as have his findings but thousands of parents have declined or postponed immunizations because of his allegations. By the way, the majority of contemporary vaccines do not have any mercury preservative and have not had them for years.

In the 1980’s there was a brief exploration of whether fenfluramine (an amphetamine) had the ability to improve autism. A study from UCLA did not substantiate this hope. In the 1990’s the use of a digestive hormone known as secretin had showed promise in the treatment of autism. This was also found not to be “the answer.” Nutritional therapies have been suggested and tried.

Currently it seems the most effective therapy for autism is intensive behavioral therapy requiring several hours per day and performed by trained personnel. This therapy has been shown to have benefit. It is also expensive and some third party payers will cover it and some not. Some states cover it in their limited budgets—other states do not. It is an important area of parent advocacy.

In the meantime, research continues. Currently, the AAP encourages all pediatricians to do a specific autism identification assessment at the 18 month and 24 month exam so as to be able to identify and to refer into early treatment children they may suspect of having an autism spectrum disorder.

## MOOD DISORDERS

There are not enough child psychiatrists in the United States to address the neurobehavioral needs of America's children. The majority of children and adolescents with ADHD, depression, or anxiety are often identified and treated by family physicians and pediatricians.

Anxiety and depression are the two most frequently encountered mood disorders that primary care physicians see.

Interestingly enough, childhood anxiety may be a reflection of parental depression. Therefore, a skillful pediatrician may need to encourage a mother or father to address their own depression rather than immediately suggesting medication for the child.

It is also important to assess any sleep disturbances in a child with symptoms of a mood disorder. One child psychiatrist I know has said: "Fix sleep first!"

There are pediatric sleep specialists who perform sleep studies and assessments of children who may have obstructive sleep apnea, restless leg syndrome, or a sleep architecture disturbance and may be presenting with symptoms of anxiety or depression.

The primary care physician also needs to do a careful social history and learn about divorce, custody disputes, how and where the child lives and sleeps—does he/she go back and forth? Is there a substance abuse problem in the family?

But in spite of all these things that may present as mood disorders there are such things as childhood depression, anxiety, and unfortunately occasional suicide. Medication treatment alone is considered superior to counseling alone but the combination of these treatment modalities is better than either alone.

I often tell the family that counseling is like finding the specific key to your own car. My key may look a little like your key but it will not start your car. Counseling can usually help you find your key!

Fluoxetine—a selective serotonin reuptake inhibitor(SSRI)—has actually been approved by the FDA for use in children eight years of age and above. Other medications may be needed as well.

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