

## **BRIEF NOTES ON THE MENTAL HEALTH OF CHILDREN AND ADOLESCENTS**

The future of our country depends on the mental health and strength of our young people. However, many children have mental health problems that interfere with normal development and functioning. In the U.S., 1 in 10 children and adolescents suffer from mental illness severe enough to cause some level of impairment. However, in any given year, it is estimated that fewer than 1 in 5 of these children receives needed treatment. Recent evidence compiled by the World Health Organization indicates that by the year 2020, childhood neuropsychiatric disorders will rise proportionately by over 50 percent, internationally, to become one of the five most common causes of morbidity, mortality, and disability among children. The mental health problems affecting children and adolescents include the following:

### **Depression**

Large-scale research studies have reported that up to 3 percent of children and up to 8 percent of adolescents in the U.S. suffer from depression, a serious mental disorder that adversely affects mood, energy, interest, sleep, appetite, and overall functioning. In contrast to normal emotional experiences of sadness or passing mood states, the symptoms of depression are extreme and persistent and can interfere significantly with the ability to function at home or at school. There is evidence that depression emerging early in life often recurs and continues into adulthood, and that early onset depression may predict more severe illness in adult life. Diagnosing and treating children and adolescents with depression is critical in preventing impairment in academic, social, emotional, and behavioral functioning and to allow children to live up to their full potential.

Depression in children and adolescents is associated with an increased risk of suicidal behaviors. Since 1964, the suicide rate among adolescents and young adults has doubled. In 1996, the most recent year for which statistics are available, suicide was the 3<sup>rd</sup> leading cause of death in 15 to 24 year olds and the 4<sup>th</sup> leading cause among 10 to 14 year olds.

Antidepressant medications are prescribed to treat children and adolescents with depression. Recent studies indicate that certain selective serotonin reuptake inhibitors (SSRIs) are safe and efficacious treatments for depression in young people. However, care must be used in prescribing and monitoring all medication. Special forms of psychotherapy, such as cognitive-behavioral therapy, have proved effective for adolescents with depression.

and current studies are evaluating the effectiveness of individual, family, and group therapies for young people. A current multi-site study of adolescents who are depressed is evaluating the comparative effectiveness of medication, psychosocial, or combined treatments.

## **Anxiety Disorders**

Anxiety disorders are the most common mental health problems that occur in children and adolescents. According to one large-scale study of 9 to 17 year olds, entitled Methods for the Epidemiology of Child and Adolescent Mental Disorders (MECA), as many as 13 percent of young people had an anxiety disorder in a year.

**Generalized Anxiety Disorder:** symptoms include exaggerated worry and tension over everyday events.

**Obsessive Compulsive Disorder (OCD):** characterized by intrusive, unwanted, repetitive thoughts and rituals performed out of a feeling of urgent need; at least one-third of adult cases begins in childhood.

**Panic Disorder:** characterized by feelings of extreme fear and dread that strike unexpectedly and repeatedly for no apparent reason, often accompanied by intense physical symptoms, such as chest pain, pounding heart, shortness of breath, dizziness, or abdominal distress.

**Post Traumatic Stress Disorder (PTSD):** a condition that can occur after exposure to a terrifying event, most often characterized by the repeated re-experience of the ordeal in the form of frightening, intrusive memories, and brings on hypervigilance and deadening of normal emotions.

Phobias: *social phobia*, extreme fear of embarrassment or being scrutinized; *specific phobia*, excessive fear of an object or situation, such as dogs, heights, loud sounds, flying, costumed characters, enclosed spaces, etc.

Other disorders: *separation anxiety*, excessive anxiety concerning separation from the home or from those to whom the person is most attached; and *selective mutism*, persistent failure to speak in specific social situations.

Various forms of psychotherapy, including cognitive-behavioral therapy and family therapy, as well as certain medications, particularly selective serotonin reuptake inhibitors (SSRIs), are used to treat anxiety disorders in children and adolescents. Research on the safety and efficacy of these treatments is ongoing.

## **ADHD**

Attention deficit hyperactivity disorder (ADHD) is the most commonly

diagnosed psychiatric disorder of childhood, estimated to affect 3 to 5 percent of school-aged children. Research shows that ADHD tends to run in families. Its core symptoms include developmentally inappropriate levels of attention, concentration, activity, distractibility, and impulsivity. Children with ADHD usually have impaired functioning in peer relationships and multiple settings including home and school. ADHD has also been shown to have long-term adverse effects on academic performance, vocational success, and social-emotional development.

Psychostimulant medications, including methylphenidate (Ritalin®), amphetamine (Dexedrine® and Adderall®), and pemoline (Cylert®), are by far the most widely researched and commonly prescribed treatments for ADHD. Numerous short-term studies have established the safety and efficacy of stimulants and psychosocial treatments for alleviating the symptoms of ADHD. A multisite study of children with ADHD recently concluded that the two most effective treatment modalities for elementary school children with ADHD are a closely monitored medication treatment and a treatment that combines medication with intensive behavioral interventions. Another study, jointly funded by the NIMH and the National Institute on Drug Abuse, has shown that boys with ADHD who are treated with stimulants are significantly less likely to abuse drugs and alcohol when they get older. In previous studies, these same researchers found that nearly twice as many adults with ADHD (that was generally not diagnosed or treated until much later in life) also abused drugs and/or alcohol at some point in their lives, compared to adults without ADHD.

## **Eating Disorders**

In the U.S., eating disorders are most common among adolescent and young women. In addition to causing various physical health problems, eating disorders are associated with illnesses such as depression, substance abuse, and anxiety disorders. Among adolescent and young adult women in the U.S., it is estimated that between 0.5 and 1.0 percent suffer from anorexia nervosa, 1 to 3 percent have bulimia nervosa, and 0.7 to 4 percent experience binge-eating disorder. There are limited data concerning the prevalence in males.

Similar to other mental disorders, such as obsessive-compulsive disorder and depression, patients with eating disorders have little control over their symptoms, and suffer from often serious and sometimes life-threatening illnesses that require medical and psychiatric attention. Because of their complexity, eating disorders call for a comprehensive treatment plan involving medical care and monitoring, psychotherapy, nutritional counseling, and medication management. Studies are investigating the causes of eating disorders and effectiveness of treatments.

## **Manic Depressive Illness**

Manic-depressive illness causes extreme shifts in mood, energy, and functioning. Overly energized, disruptive, and reckless periods alternate with periods of sadness, withdrawal, hopelessness, and other depressive symptoms. Unlike normal mood states of happiness and sadness, symptoms of manic-depressive illness can interfere with school performance, family relationships, peer interactions, and other everyday activities. Although manic-depressive illness typically emerges in late adolescence or early adulthood, there is increasing evidence that the disorder also can begin in childhood. According to one study, one percent of adolescents ages 14-18 were found to have met criteria for manic-depressive illness or cyclothymia, a milder form of the illness, in their lifetime.

NIMH research efforts are attempting to clarify the diagnosis, course, and treatment of manic-depressive illness in youth. Evidence suggests that manic-depressive illness beginning in childhood or early adolescence may be a different, possibly more severe form of the disorder than older adolescent and adult-onset manic-depressive illness. When the illness begins before or soon after puberty, it is often characterized by a continuous, rapid-cycling, and mixed symptom state that may co-occur with ADHD or other behavioral disorders, or may have features of these disorders as initial symptoms. In contrast, later onset manic-depressive illness appears to begin suddenly, often with a manic episode, and to have a more episodic pattern with relatively stable periods between episodes.

Various treatments known to be effective in adults with manic-depressive illness also may help relieve the symptoms in young people. The essential treatment for this disorder is the use of appropriate doses of mood stabilizing medications. The most typical is lithium, known to be very effective in adults for controlling mania and preventing recurrences of manic and depressive episodes. Research on the effectiveness of this and other medications in children and adolescents with manic-depressive illness is ongoing. In addition, studies are investigating various forms of psychotherapy to complement medication treatment for this illness in young people.

## **Autism and Other Pervasive Developmental Disorders**

Autism and other pervasive developmental disorders are brain disorders that occurs in as many as 2 in 1,000 Americans. They typically affect the ability to communicate, form relationships with others, and respond appropriately to the outside world. The signs of autism usually develop by 3 years of age. The symptoms and deficits associated with autism may vary among people with the disorder. While some individuals with autism function at a relatively high level, with speech and intelligence intact, others are developmentally

delayed, mute, or have serious language difficulty.

Research has made it possible to identify earlier those children who show signs of developing autism and thus initiate early intervention. Both psychosocial and pharmacological interventions can improve the behavioral and cognitive functioning of children with autism. Studies to evaluate medications such as risperidone and valproate are investigating their effects on cognition, behavior, and development, as well as their safety and efficacy. Emerging evidence is suggesting that certain genetic factors may confer susceptibility to the disorder and studies are underway to better understand this process. The prospect of acquiring basic biologic knowledge about autism holds hope for the development of future therapies.

## **Schizophrenia**

Schizophrenia is a chronic, severe, and disabling brain disorder that affects about 1 percent of the population during their lifetime. Symptoms include hallucinations, delusions, disordered thinking, and social withdrawal.

Schizophrenia appears to be extremely rare in children; more typically, the illness emerges in late adolescence or early adulthood. However, research studies are revealing that various cognitive and social impairments may be evident early in children who later develop schizophrenia. These and other findings may lead to the development of preventive interventions for children.

Only in this decade have researchers begun to make significant headway in understanding the origins of schizophrenia. In the emerging picture, genetic factors, which confer susceptibility to schizophrenia, appear to combine with other factors early in life to interfere with normal brain development. These developmental disturbances eventually appear as symptoms of schizophrenia many years later, typically during adolescence or young adulthood. A number of new, effective medications for schizophrenia have been introduced during the past decade.

## **Tourette's Syndrome**

Tourette's Syndrome (TS) is characterized by repeated, involuntary movements and uncontrollable vocal sounds, known as tics. Affecting approximately 100,000 Americans in its full-blown form, TS generally emerges during childhood or early adolescence.

Although the basic cause of TS is unknown, current research suggests there is a genetic abnormality affecting certain neurotransmitters in the brain, and that varying environmental factors, possibly including infections, modifies the clinical expression of the disorder. Symptoms of TS are seen in association with some other neurological disorders, particularly OCD. Researchers are investigating the neurological similarities between OCD and TS to determine

whether a genetic relationship exists.

In most cases, Tourette's Syndrome is not disabling, symptoms don't impair patients, development proceeds normally, and there is no need for treatment. However, some effective medications are available in the rare instances when symptoms interfere with functioning. Children with TS can generally function well at home and in the regular classroom. If they have an accompanying learning disability or other disorder, such as ADHD or OCD, they may require tutoring, special classes, psychotherapy, or medication.

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