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Bipolar Children: Cutting-Edge Controversy

SHARNA OLFMAN

> On December 13, 2006, 4-year-old Rebecca Riley died of a prescription drug overdose. At $2\frac{1}{2}$ years of age, she was diagnosed with both bipolar disorder (BD) and attention-deficit/hyperactivity disorder (ADHD) by a respected psychiatrist at a clinic affiliated with Tufts University, who prescribed three medications; Depakote, an anti-seizure drug, Clonidine, an anti-hypertensive, and Seroquel, an antipsychotic. These three drugs were in her system at the time of her death.[1]

Until recently, giving toddlers multiple psychiatric diagnoses and drug cocktails was unheard of. Bipolar disorder was considered to be a rare, devastating disease whose average age of onset was adolescence or early adulthood. But in the last two decades, the field of children's mental health has undergone a disturbing change. Multiple diagnoses and polypharmacy regimens for children have became the norm, and BD is being diagnosed in children (some as young as one year of age) routinely. Many of these "bipolar" children have already received a diagnosis of ADHD and/or depression, and their new drug prescriptions for bipolar disorder are often added to ones that they are already taking. Bipolar preschoolers are now being recruited for drug trials of antipsychotics.

Why has our approach to the causes and treatment of children's psychological disturbances—and to pediatric bipolar disorder in particular—changed so dramatically? One widely held view is that advances in medical technologies, such as genetic mapping and fMRI scans, have led to a more finely honed understanding of the genetic and neurological origins of mental illnesses, which prompted the

development of new drugs that target the source of these illnesses with laser-like precision. It is also widely believed that we have recently learned to recognize the early signs and symptoms of BD as they manifest in children, which we failed to notice in the past. But research does not support these claims. To date there are no genetic markers or brain-imaging tests that can definitively diagnose BD. Psychiatric assessment is still based on taking a family history, observing patients' behaviors and moods, self-reports, and impressions of caregivers such as parents and teachers—albeit often in an increasingly hasty and superficial fashion. And the "new" classes of drugs that are being used to treat BD are—if anything—less rather than more specific. In fact, these so called new drugs are anticonvulsants, which were designed to treat epilepsy, and atypical antipsychotics, which were originally developed to treat schizophrenia. The anticonvulsants and antipsychotics have simply been rebranded by pharmaceutical companies as "mood stabilizers." Both classes of drugs are major tranquilizers, and therefore they have a calming effect on agitated or manic patients. But it is important to note that *they do not address an underlying disease process* in the way that an antibiotic does. They treat symptoms, not underlying causes. Moreover, their effects are generic, so that *anyone* who takes them will be tranquilized. Worse still, none of these drugs has been approved by the U.S. Food and Drug Administration (FDA) for the prevention or cure of bipolar illness.[2]

In January 2007, the American Academy of Child and Adolescent Psychiatry (AACAP), the governing body of child and adolescent psychiatrists in the United States, issued new practice parameters for the assessment and treatment of children and teens with bipolar disorder in order to address some of these misconceptions. The authors of the AACAP practice parameters state the following:

- "The evidence is not yet sufficient to conclude that most presentations of juvenile mania are continuous with the classic adult disorder."[3]
- "The validity of diagnosing bipolar disorder in preschool children has not been established."[4]
- "The U.S. Food and Drug Administration (FDA) [has been advised] to only extend medication treatment studies down to age ten years, given concerns about the challenge of accurate diagnosis in younger children."[5]
- "The short- and long-term safety of mood stabilizers and atypical antipsychotic agents . . . in young children has not been established. It is particularly important with preschoolers that intervention strategies address environmental, developmental, temperamental, and social factors that may relate to symptom presentation."[6]

- "There are no biological tests, [not even] imaging or genetic studies, that are helpful in making the diagnosis of a bipolar disorder."[7]

This book examines the astonishing rise in the diagnosis of bipolar disorder in childhood in the absence of any compelling evidence for either the validity of the diagnostic criteria currently used, or for the safety and efficacy of the drugs being prescribed to treat it. It is not an "anti-psychiatric" or "anti-medical model" treatise. After all, three of the authors contributing to this volume are medical doctors (two psychiatrists and a developmental pediatrician), and all prescribe psychotropic drugs in a judicious manner. None of us would deny that genetic, neurological, and hormonal factors play a role in some psychological disturbances. The contributors to this volume do not reject science. Quite the contrary, we insist that rigorous scientific standards that do not imperil children's safety be reinstated in the research and treatment arenas. In order to fully appreciate the conditions that set the pediatric bipolar epidemic in motion, it is useful to begin with a brief history of bipolar illness.

BIPOLAR DISORDER IN HISTORICAL PERSPECTIVE

Originally named "manic-depressive psychosis," bipolar disorder was the first psychiatric illness to be identified by Emile Kraepelin—known as the father of modern psychiatry—in 1896. After a century of research on bipolar illness, Kraepelin's original descriptions of its symptoms and course have proven to be remarkably robust.[8] The international medical community still believes, as did Kraepelin, that BD is a devastating, albeit rare, genetically influenced brain disorder that begins in late adolescence or early adulthood, and is characterized by intense cycles of mania and depression. Outside of the United States, bipolar disorder is diagnosed less frequently than schizophrenia, itself an uncommon disorder.[9]

Symptoms typical of mania include marked euphoria, grandiosity, irritability, racing thoughts, increased psychomotor activity, rapidly shifting mood, and sleep disturbance. Paranoia, confusion, and psychosis are also typical. Depressive episodes are characterized by psychomotor retardation, oversleeping, suicide attempts, and often psychosis. Left untreated, the crashing lows and manic highs that are the hallmark of BD can ruin the lives of individuals and families.[10] Fortunately, in the mid-twentieth century Australian psychiatrist John Cade discovered that lithium carbonate not only had a calming effect on manic episodes, but also seemed to prevent future cycles of depression and mania. Although considered old-school by many practitioners,

lithium carbonate remains the only drug that is recognized by the FDA to have a prophylactic effect on bipolar illness.

Approaches to diagnosis and treatment of BD in the United States began to diverge from those accepted in the rest of the world with the publication of the 1987 edition of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-III-R*), the preeminent American system of psychiatric diagnosis. This version of the *DSM* introduced BD subtypes, which both broadened and diluted the criteria for diagnosing the disorder. The most current edition, the *DSM-IV-TR* (published in 2000), includes the following bipolar disorder subtypes:

- Bipolar 1 disorder with manic episode: Diagnosis requires one full-blown manic episode that lasts a minimum of seven days, although depression is not a requisite part of the symptom picture.
- Bipolar 2 disorder: Diagnosis is based on periods of major depression and at least one episode of "hypomania," a less intense form of mania that need be present for only four days.
- "Rapid-cycling" bipolar disorder: Diagnosis is based on the occurrence of at least four mood episodes per year.
- Bipolar disorder NOS (not otherwise specified): This diagnosis is given to patients whose symptoms do not meet the criteria for other bipolar diagnoses.

After bipolar subtypes were introduced into the *DSM* classification system, the number of U.S. adults meeting these much broader criteria began to soar. It is important to note that the World Health Organization, which publishes the *International Statistical Classification of Diseases and Related Health Problems*, now in its tenth edition (*ICD*-10), has more stringent diagnostic criteria for BD, which remains a rare disorder of adulthood.[11]

In the mid-1990s two child psychiatry research groups—one at Harvard, another at Washington University—began to train their attention on pediatric bipolar disorder. Both groups contend that until recently, bipolar disorder was underdiagnosed in children because the early symptoms of the illness are typically different from those in the adult phase. Both groups stress that a majority of bipolar children also suffer from ADHD, and that many were erroneously diagnosed with depression. The Washington group, headed by Barbara Geller, claims that children with bipolar illness often cycle through manic episodes that may last from a few minutes to a few days, as compared to manic episodes in adults that generally continue for several weeks or months if left untreated. Geller refers to brief, frequent manic episodes lasting from a few hours to less than four days as *ultrarapid cycling*, and she calls repeated brief daily cycles that last from minutes to hours *ultra-*

dian cycling. The Harvard group, led by Joseph Biederman, claims that bipolar children may not exhibit cyclic mood disturbances at all. Instead, they assert that these children may be chronically irritable and explosive, or chronically depressed and angry. Biederman's group has conducted several antipsychotic drug trials with bipolar preschoolers. As a result of Biederman and Geller's research, the diagnostic criteria for pediatric BD now extend to children who have brief stormy episodes of "mania" lasting only minutes, and to extremely moody, irritable, aggressive, or emotionally explosive children whose symptoms have almost no continuity with the *DSM* criteria, which are themselves much less stringent than the *ICD*-10 criteria.[12]

FROM THEORY TO PRACTICE

Claims by Geller and Biederman, that bipolar disorder often begins in childhood but with a different symptom picture, set the stage for the dramatic rise in the diagnosis of pediatric BD. But the diffusion of their ideas was greatly accelerated by a series of books written for the general public, the establishment of Web sites devoted to information about BD (which are heavily funded by drug companies), and the proliferation of bipolar drug ads targeted to consumers. In these materials, pediatric bipolar symptoms are stretched even further to include mildly irritable kids; preschoolers prone to temper tantrums; and creative, jubilant, high-energy children, many of whom have ended up on antipsychotics after a quick visit to the pediatrician.

The 2007 AACAP practice parameters represent an effort to stem these reckless diagnostic and prescribing practices by elucidating the differences between tentative research findings and sound clinical practice. However, despite the authors' honorable intentions, their recommendations scarcely address the many troubling questions that they themselves raise. The preamble to the AACAP practice parameters clearly states that there is no evidence to date that children exhibiting anything other than the classic symptoms of bipolar illness will in fact become bipolar adults. Yet the parameters also recommend that children with symptoms such as those identified by Biederman—which bear only a remote resemblance to the criteria for BD described in the *DSM*—be labeled "bipolar disorder NOS," without providing a cogent rationale for doing so. Unfortunately, whatever the theoretical rationale for a move like this might be, adding the caveat "not otherwise specified" to a diagnosis of BD will have almost no impact in terms of how an ostensibly bipolar child is regarded and treated by her parents, her teachers, and her physician, who will prescribe accordingly. The reason this is troubling is that the AACAP authors

also state that the safety of atypical antipsychotic and anticonvulsant drugs has not been established with children, and yet, antipsychotic and anticonvulsant drugs are listed as first-line treatments for children diagnosed with bipolar 1 disorder. Finally, although they assert that there is no reliable method for diagnosing BD in preschool children, the authors do not recommend a moratorium on this practice and instead merely counsel caution.

Of even greater concern is the way in which the AACAP's practice parameters become diluted as they filter down—from clinicians working in university-affiliated clinics to psychiatrists in private practice; to pediatricians with no training in psychiatry or psychology; to harried, sleep-deprived residents and interns, who treat the vast majority of disadvantaged children. As a consequence, in the span of a decade, there has been a greater than fourfold increase in the number of children being diagnosed with BD—a trend that is exclusive to the United States. The majority of diagnosed children are being prescribed antipsychotic drugs, often in combination with anticonvulsant drugs. These classes of drugs have dangerous side effects that have led to a doubled mortality rate, shortened lifespan, extreme weight gain, and occurrence of type 2 diabetes.[13]

PEDIATRIC DEPRESSION AND THE SSRIs: A CAUTIONARY TALE ABOUT CONFLICT OF INTEREST

Whereas ADHD, with its attendant stimulant prescriptions, was the "darling" of child psychiatry in the 1980s, pediatric depression became the "diagnosis du jour" in the 1990s, leading to a steep rise in the prescription of SSRI[14] antidepressants such as Prozac to children and teens. Several years ago, psychiatrist David Healy, an international expert on mood disorders, discovered that the pharmaceutical industry was suppressing research demonstrating that SSRI antidepressants place children and adolescents at greater risk for suicidal and violent behavior. As a consequence of Healy's advocacy, SSRI antidepressants are now banned for use as first-line treatment for children in the United Kingdom. (An exception to the ban is Prozac, which can still be prescribed, but only after other interventions, such as psychotherapy, have been tried.) Healy's advocacy also influenced the October 2004 decision by the FDA that required all SSRI antidepressant prescriptions for children and adolescents to be issued with black-box warnings on package inserts stating that these drugs are known to increase the risk of suicidality in children. Requiring a black-box warning is the most stringent measure the FDA takes, short of removing a drug from the market.

Immediately following the FDA's ruling, the AACAP published comprehensive review articles that counseled caution in the use of antidepressant medications with children, but at the same time issued several statements and news releases urging psychiatrists to continue prescribing SSRIs for childhood depression. As a result there was a brief lull in SSRI sales immediately following the FDA decision, but antidepressant drug prescriptions to children are again proceeding apace.[15]

In the wake of his findings, Healy curtailed his ties with the pharmaceutical industry and lobbied vigorously to redress the conflicts of interest between the pharmaceutical industry and medical research. Unless the authors of medical treatment guidelines become completely free of drug company ties, they will be deterred from making treatment recommendations that undermine the market share of the companies that fund their research and pay their salaries.

The AACAP bipolar practice parameters document disclosed that two of its three authors had ties to the pharmaceutical industry. Lead author Robert McClellan received a research grant from Pfizer, and Robert Findling received research support, consulted with, and served on the speakers' bureaus of no fewer than sixteen pharmaceutical companies (Abbott, AstraZeneca, Bristol-Myers Squibb, Celltech-Medeva, Forest, Glaxo SmithKline, Johnson & Johnson, Lilly, New River, Novartis, Otsuka, Pfizer, Sanofi-Aventis, Shire, Solvaty, and Wyeth). As in the case of pediatric depression and the SSRIs, mental health practitioners will merely give lip service in their efforts to stem reckless diagnostic and prescription practices as long as profit-driven drug companies continue to fund the research on pediatric bipolar disorder. In light of the dire consequences for millions of children affected by irresponsible polypharmacy, these conflicts of interest are more than just misguided—they are completely immoral and should be made illegal.

THE PEDIATRIC BIPOLAR EPIDEMIC IN CULTURAL CONTEXT

Questionable diagnostic and prescribing practices, fueled in large part by unethical partnerships between the medical profession and the pharmaceutical industry, are the direct cause of the American pediatric bipolar epidemic, but broad cultural trends have acted as enablers. These include the glaring absence of support for families in this nation, and society's faith in the "technological fix."

Families under Siege

One cultural condition that set the stage for the steep rise in child psychiatric diagnoses in general—and diagnoses of bipolar disorder

in particular—is the dearth of public policy that supports the welfare of U.S. children and families. As expressed by Urie Bronfenbrenner, one of the finest developmental psychologists of the twentieth century: "The heart of our social system is the family. If we are to maintain the health of our society, we must discover the best means of nurturing that heart."[16] Tragically though, as Bronfenbrenner noted toward the end of his career, "the comparative lack of family support systems in the United States is so extreme as to make it unique among modern nations."[17]

How can a mother who must return to work only days after giving birth—while placing her newborn in substandard care—establish a secure attachment with her infant? If a single mother must work two or three low-wage jobs to make ends meet while her children return to an empty home, how can she scaffold their arduous journey toward adulthood? And how can she protect them from the tidal wave of violence, hatred, racism, sexism, and pornography that pervades the media? And if this mother is the second or third generation to have raised children under these compromised circumstances, how will she herself have acquired the psychological maturity and wisdom to relate lovingly and responsibly to her children? But these are precisely the conditions under which millions of American parents are obligated to raise their children. And when parents are overwhelmed, their children are more likely to be overwhelmed and overwhelming. Parents in turn become more reliant on and more vulnerable to the current climate in child psychiatry that views virtually all forms of psychological distress as a medical illness to be treated with drugs.

Mind as Machine Medicine

The medical model of mental illness conceptualizes psychological distress as symptomatic of an underlying medical condition. So, for example, just as fever may signify the presence of a virus, depression and mania are assumed to point to the presence of a genetically influenced brain disorder. This model makes an important contribution to the mental health field because it recognizes that genetic predisposition and brain anomalies can play a role in psychological disturbance. However, other models are equally essential to understanding the cause and cure of mental illness because they elucidate the role of social and cultural forces and the human condition in all of its rich complexity. The field of developmental psychology also offers vital insights, because it provides a yardstick of healthy development against which to measure disturbance. In addition, child development research sheds light on the complex and inextricable interplay of genes and environment that together shape brain development.

The medical model of mental disorders has monopolized the mental health field in recent decades, however, effectively "muscling out" other approaches and leading to a biased and distorted understanding of the cause and cure of psychological disturbance. The medical model holds so much sway in psychiatry, in part because it resonates so well with America's deep faith in technologies and the technological fix. The medical model lends itself to a conceptualization of the human mind as a machine whose software is a set of genes that we are learning to decode and recode, and whose hardware can be corrected or enhanced pharmacologically. Society has bought into the "mind as machine" metaphor to the extent that even children's expressions of emotion are being translated into the language of symptoms in need of pharmacological overhaul, as opposed to being accepted as meaningful communication. So, for example, a child's jubilant elation is reframed as "hypomania" and her sadness is termed "depression."

Learning to Feel

Emotions are not simple reflexes or instincts that are present in their mature form at birth and that are either in working order or in need of an "adjustment." Like other lines of development—such as intellectual, language, personality, and social development—emotional development follows a trajectory that is powerfully shaped by experience. In the early months and years, healthy emotional development depends on loving and consistent attachment to parents and other caregivers. As psychologist Robert Karen explains in *Becoming Attached*:

> The concept of "attachment", born in British psychoanalysis some forty years ago and nurtured to near maturity in the developmental psychology departments of American universities . . . encompasses both the quality and strength of the parent-child bond, the ways in which it forms and develops, how it can be damaged and repaired, and the long-term impact of separations, losses, wounds, and deprivations. Beyond that, *it is a theory of love and its central place in human life*.[18]

The attachment relationship teaches the infant to modulate, interpret, and communicate emotions. Sue Gerhardt describes this process in *Why Love Matters: How Affection Shapes a Baby's Brain*:

> To become fully human, the baby's basic responses need to be elaborated and developed into more specific and complex feelings. With parental guidance, the basic state of "feeling bad" can get differentiated into a range of feelings like irritation, disappointment, anger, annoyance

> and hurt. . . . [T]he baby or toddler can't make these distinctions without help from those in the know. The parent must also help the baby to become aware of his own feelings and this is done by holding up a virtual mirror to the baby, talking in baby talk and emphasizing and exaggerating words and gestures so that the baby can realize that this is not mum or dad just expressing themselves, this is them "showing" me my feelings. It is a kind of "psychofeedback" which provides the introduction to a human culture in which we can interpret both our own and others' feelings and thoughts. Parents bring the baby into this more sophisticated emotional world by identifying feelings and labeling them clearly. Usually this teaching happens quite unselfconsciously.[19]

As Toni Vaughn Heineman discusses in Chapter 6, when a child is deprived of consistent and loving care in the first months and years of life, her emotional development will be stunted. For such a child, everything from mild disappointment to profound loss may engender rage, and everything from a simple courtesy to passionate love may elicit elation. Conversely an emotionally deprived child might defensively blunt all emotionally loaded experiences. We can imagine how in the current climate, derailed emotional development might be recast as early onset bipolar disorder.

EMOTIONS AND THE HUMAN CONDITION

When children's emotions—their highs and lows, anger and frustration, humiliation, irritation, giddiness, joy, and enthusiasm—are stripped of meaning and read exclusively as "symptoms," the consequences are profound. One of the most established theories to emerge from the discipline of social psychology is attribution theory. Simply put, when we attribute our behavior and our choices to forces beyond our control, we are much less likely to make an effort to modulate our behavior in the future. For example, if a child feels that her poor math score is attributable to her lack of talent in mathematics, then she is more likely to zone out, not do her homework, and not study very hard for her tests. By contrast, if she believes she has the potential to achieve excellent results, this will increase the likelihood that she will intensify her efforts in future. Similarly, when a young child is told by her parents and her doctor that, for example, her rudeness, tantrums, or flippant remarks are symptoms of an illness, then she and they will think that she is incapable of modulating her behavior without a drug intervention, and this effectively will cut off the process of emotional development by short-circuiting opportunities for life lessons and personal accountability. When emotional expression is stripped of meaning, then a deeply troubling or traumatic experience may remain

unearthed, and the child may be taught, in effect, to tune out her feelings as well as those of others.

When a form of experience and expression that is integral to our humanity and essential to our full engagement with life is reduced to a symptom, then we are *dehumanizing* our children and treating them like machines to be programmed rather than as children to be loved, taught, mentored, and disciplined. We do this in the name of science, and for the sake of our own convenience and peace of mind. But in so doing, we undermine our children's capacity to experience life fully and to empathize with others, and we curtail their chances of experiencing genuine intimacy and of forming stable and sustaining personal relationships with others. In short, we compound the systemic problems that gave rise to our children's problems in the first place!

STEMMING THE TIDE OF THE PEDIATRIC BIPOLAR TSUNAMI

Many of the children and adolescents who have been *labeled* with BD, now numbering in the millions, are in great emotional pain, and in some cases they are an overwhelming challenge to their families. But in the vast majority of cases, they are not suffering from BD. A child who is misdiagnosed with a bipolar illness is effectively denied treatment for the real source of her suffering. And when we expand and distort the diagnostic criteria for BD beyond recognition, we risk making a mockery of a grave illness, and may deny those who do suffer from it access to effective research and treatment. When a child is unnecessarily prescribed antipsychotic and anticonvulsant drugs, her mental and physical health may be irrevocably compromised. With as many as two and a half million children from across the socioeconomic spectrum now taking antipsychotics, we have set the stage for wide-scale child abuse. We must stem this tide of misdiagnoses and dangerous drug prescriptions. Together, the contributors to this book identify the complex and interrelated factors that have set the stage for the pediatric bipolar epidemic in order to raise awareness and recommend practice and policy changes.