Bipolar disorder (BD) is a chronic, recurrent disorder carrying high morbidity and mortality, leading to health costs of at least $45 billion per year (Kleinman et al., 2003). It is the sixth leading cause of disability among all illnesses (Murray & Lopez, 1996). Between 15 and 28% of bipolar adults experience illness onset before the age of 13, and between 50 and 66% of them experience it before the age of 19 (Leverich et al., 2002, 2003; Perlis et al., 2004). The exact prevalence in children is unknown, but an estimated 420,000–2,072,000 US children have the illness (Post & Kowatch, 2006). Persons with onset of BD in childhood or adolescence have a more severe, adverse, and continuously cycling course of illness than adults, often with a preponderance of mixed episodes, psychosis, suicidal ideation or behaviors, and multiple comorbidities (Geller et al., 2002). Without early intervention, early-onset BD patients can be derailed, sometimes irrevocably, in social, neurobiological, cognitive, and emotional development (Miklowitz et al., 2004).

In the last decade, there has been a flurry of research targeting effective pharmacotherapies and psychotherapies to treat BD in children and adults. Much disagreement exists about the appropriate boundaries between pediatric-onset BD and other childhood psychiatric disorders, the continuity between the pediatric, adolescent, and adult forms of the illness, the population prevalence of the childhood-onset forms, and the pharmacological strategies that are appropriate in younger age groups (Leibenluft, Charney, Towbin, Bhangoo, & Pine, 2003; McClellan, 2005; NIMH, 2001). Fortunately, these disagreements have not stalled efforts to identify biological or psychological risk markers or to develop and test early intervention and prevention programs. Intervening early in the illness may prevent inappropriate interventions that may worsen or hasten the development of BD, delay the onset of a first manic episode, and/or prevent the development of full-blown BD.

The purpose of this Special Issue is to acquaint readers with current thinking about the diagnosis, course, etiology, and pharmacological and psychosocial treatment of BD or its prodromal forms. We asked each set of authors to consider BD from a developmental psychopathology perspective: what do we know about how the symptoms of BD emerge...
over time, at different stages of development? How do these dynamic processes unfold in the context of other risk and protective factors? In what ways do traditional treatments (pharmacotherapy) and adjunctive treatments (psychosocial intervention) have to be modified to take into account age, developmental stage, and phase of the illness? What factors moderate responses to treatment, and what might be some of the mediating mechanisms by which treatments operate?

This Special Issue on BD is extremely important because it highlights the life span perspective embodied by the field of developmental psychopathology (Cicchetti, 1993, 2006). A developmental understanding of adaptation is not limited to childhood; rather, it cuts across all periods of the life course. Thus, this Special Issue attempts to get beyond the DSM IV based view of BD as a category whose onset simply varies across the age span to consider how bipolar symptoms emerge over time in the context of different risk and protective factors in the social, emotional, cognitive, or biological developmental domains (Cicchetti & Rogosch, 2002; Cicchetti & Toth, 1995; Miklowitz, 2004).

Four Themes

The first theme of the Special Issue is the attempt to describe and validate the bipolar diagnosis at different stages of development. Carlson and Meyer take a purely phenomenological approach to describing the disorder in school-aged children; likewise, Luby and Belden take on the controversy of describing and classifying preschool mania. There are considerable complexities to assessing the symptoms of pediatric BD and distinguishing it from near-neighbor conditions such as attention-deficit/hyperactivity disorder (ADHD). As Youngstrom, Meyers, Youngstrom, Calabrese, and Findling point out, the reliability and validity of the diagnostic criteria for these disorders have considerably advanced this nascent field.

A second theme is the course and prognosis of illness: how do these illnesses unfold over time, especially among children whose symptoms fall short of the fully syndromal condition? Birmaher and Axelson report the findings of their innovative longitudinal study of bipolar I, bipolar II, and bipolar not otherwise specified disorder among children and teenagers. They find that a considerable number of children “convert” from prodromal forms of the disorder to the full syndrome in relatively short intervals (84 weeks). The outcome of these disorders is sobering: most bipolar children are at high risk for suicide, poor functioning, and end up treated with multiple medications.

Tillman and Geller report the surprising finding that children with ADHD are at relatively high risk (28.5%) for switching to prepubertal or early adolescent BD over a 6-year period. It would appear that ADHD is a risk factor for BD, especially when there is a family history of affective disorder.

The bulk of this Special Issue focuses on a third theme: the interactive roles of psychobiological vulnerability and stress in the onset and course of BD. Alloy, Abramson, Walshaw, Keyser, and King discuss dysregulation in the behavioral approach and inhibition systems, both of which require psychosocial triggers for mood symptoms to become manifest. Dickstein and Leibenluft take a different tack, examining emotional dysregulation in bipolar, ADHD, and normal children from the vantage points of experimental psychopathology paradigms and functional magnetic resonance imaging (fMRI). Chang, Adleman, Wagner, Barnea-Goraly, and Garrett address the gradually emerging technology of fMRI as a means of distinguishing bipolar children from healthy children. Although there is no definitive biological marker for BD, investigators are beginning to identify how brain function and structure, as revealed by fMRI, change at different phases of the development of BD.

Harvey, Mullin, and Hinshaw examine the role of sleep and wake rhythms in BD. Sleep has long been hypothesized to be a major contributor to mood shifts, although the cause/effect relation between mood and sleep cycles is still unclear. On the stress side of the equation, Johnson and McMurrich discuss the significant literature on life events, and the
mechanisms by which life events act as pro-
voking agents in the cycling of pediatric
and adult BDs. Post and Leverich provide
an overarching framework that explains the
interactive roles of stress, neurodegenerative
changes, and mood disorder recurrences over
time, and the potentially protective role of early
intervention or prevention in altering this de-
velopmental trajectory.

A fourth theme is treatment. The mainstay
of treatment for BD across the life span is still
pharmacotherapy. Rather than simply summa-
rizing the extensive pharmacotherapy litera-
ture, Thase discusses the real unmet need of
persons with BD: how to get control over the
unremitting and highly recurrent depressive
phases of the illness, and the various agents
(lithium, anticonvulsants, atypical antipsychot-
ics, and antidepressants) that currently do and
do not have supportive data. Delbello and Ko-
watch focus more extensively on children and
the complexities of treating manic and depres-
sive phases, especially when there are numer-
ous comorbidities involved. The reader will
be surprised at the extent to which pharma-
ocological agents currently in wide use often lack
data supporting their effectiveness.

Three new forms of psychosocial treat-
ment are discussed. Miklowitz, Biuckians, and
Richards discuss family-focused treatment, an
established psychosocial intervention for adult
bipolar illness (Miklowitz, George, Richards,
Simoneau, & Suddath, 2003), as an adjunct
to pharmacotherapy in adolescent bipolar pa-
tients. Hlastala and Frank describe their be-
inning work on applying interpersonal and
social rhythm therapy to teen patients. Both
of these models were originally developed for
adults, and the developmental adaptations the
model required for younger patients will be
of considerable interest to this readership. Fi-
nally, Fristad presents her group’s data on
multifamily and individual family psychoedu-
cation groups for school-aged bipolar chil-
dren. The reader will note the similarities and
differences in psychosocial approaches de-
pending on age group, theoretical orienta-
tion, and whether the family is involved in
treatment.

It is our hope that this Special Issue will
give the reader a sense of how much progress
has been made in the developmental psycho-
pathology and treatment of BD. It will also
raise as many questions as it answers. Despite
the exciting progress that has occurred, there
is a great deal to be accomplished in advanc-
ing an integrative life span developmental
understanding of BD. The developmental ques-
tions raised in this Special Issue make clear
that progress toward a process-level compre-
hension of BD will necessitate the implemen-
tation of research designs that incorporate
multiple domains of variables within and out-
side the individual over developmental time.
We believe that the most pressing and critical
research questions are those that can be an-
swered only in the broader context of theoret-
cally informed variables, within and outside
the individual who has, or is at-risk for, bi-
polar illness, especially as these variables
change and influence one another over the
course of development. We believe that not
only will a more sophisticated and compre-
hensive understanding of adaptation and malad-
aptation in individuals with BD ensue, but
also that this “multiple levels of analysis” per-
spective (Cicchetti & Blender, 2004; Cic-
chetti & Dawson, 2002; Miklowitz, 2004) will
facilitate the translation of knowledge into
developing interventions that prevent and ame-
liorate psychopathology. Such an interdisci-
plinary, multiple levels of analysis approach
has the potential to become the guiding light
for the next generation of studies on BD.

References

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