# Chapter 9
# Borderline Personality and Mood Disorders: Risk Factors, Precursors, and Early Signs in Childhood and Youth

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## Introduction

Approximately 75 % of all mental disorders have their onset by the age of 25 years, with the peak period of onset for the major mental disorders, including depression, bipolar disorder, and borderline personality disorder, occurring in the period from puberty through to young adulthood [1–5].

However, mental disorders do not present autochthonously. Young people most commonly present with an evolving mixture of symptoms, and our limited understanding of the prospective relationships between these symptoms and the major mental disorder syndromes suggests a more complicated picture. Diagnostic clarity is often only possible in retrospect. Nonetheless, even without a clear diagnosis, the presence of psychopathology and distress can have adverse consequences upon development, such as disruption to education, work, and relationships with family and peers. This is particularly the case when treatment is delayed [2, 6], which can lead to persistent functional deficits.

On this basis, there is a clear need for effective early intervention. This term defines both early detection and intervention for subsyndromal (a.k.a. indicated prevention) and syndromal (first episode) mental disorders to reduce the burden of

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disease among young people and their families. One key challenge for early intervention is to balance the sensitivity and specificity of any early detection program. Effective early intervention improves the developmental and functional outcomes for individuals. Spurious diagnostic certainty can lead to the misapplication of diagnostic labels, stigma, inappropriate treatment, and other adverse outcomes.

The debate about the relationship between borderline personality disorder and the mood disorders has largely been framed around the phenomenology of the respective disorders, rather than their etiology or pathogenesis [7]. Most phenomenological studies have been conducted in adults, when the disorders have largely "run their course" and where retrospective reports are often hampered by recall bias, making uncertain the timing of symptom and/or disorder onset [2]. Moreover, the use of patient samples in many studies [8, 9] means that "Berkson's bias" [10], whereby people who meet criteria for multiple disorders are more likely to be treatment seeking than people who meet criteria for just one disorder, is likely to lead to inflated levels of co-occurrence.

Clinical assessment tends to focus upon eliciting risk factors and phenomenology from the patient's life narrative. This chapter focuses upon the challenge of early intervention for borderline personality and mood disorders in the real-world clinical context of phenomenological change and evolution and where many risk factors (particularly environmental factors) commonly lead to diverse outcomes (i.e., multifinality) [11]. It therefore draws upon prospective, longitudinal data (where available) regarding the development of these disorders and proposes a pragmatic heuristic framework for conducting early intervention.

## Risk Factors, Precursors, and Early Signs of Psychopathology in Young People

### *Borderline Personality Disorder*

Despite long-standing general agreement that personality disorders have their roots in childhood and adolescence [12], diagnosing personality disorders prior to age 18 years has been more controversial than diagnosing personality disorders in adults [13], but this is no longer justified [14, 15]. Borderline personality disorder is increasingly seen as a lifespan developmental disorder [16] that is similarly reliable and valid when applied to adolescents or adults [17, 18], is not reducible to other diagnoses [19], and can be identified in day-to-day clinical practice [20].

In fact, borderline personality disorder might be better considered as a disorder of younger people, with a rise in prevalence from puberty and a steady decline with each decade from young adulthood [21–23]. Limited data suggest that borderline personality disorder occurs in approximately 3 % of community dwelling [24, 25] and up to 22 % of outpatient [20, 26] adolescents and young adults.

Borderline personality disorder (or dimensional representations of borderline personality disorder) in young people demarcates a group with high morbidity and

a particularly poor outcome. Borderline personality disorder uniquely and independently predicts current psychopathology, poor general functioning, poor self-care, and poor relationships with family, peers, and significant others [19, 27]. It also uniquely predicts poor outcomes up to two decades into the future, such as a future borderline personality disorder diagnosis, increased risk for other mental disorders (especially substance use and mood disorders), interpersonal problems, distress, and reduced quality of life [4, 28, 29].

There is now clear evidence that dimensional representations of borderline personality disorder features have similar stability in adolescence and adulthood [17]. Evidence is emerging that the underlying dimensions of borderline personality disorder features (conceptualized as impulsivity, negative affectivity, and interpersonal aggression) might also be relatively stable in children [30, 31]. Only one study has specifically measured childhood or adolescent personality disorder features as a predictor of later personality disorder over multiple assessments from childhood to adulthood [4]. Personality disorder symptoms in childhood or adolescence were the strongest long-term predictors, over and above disruptive behavior disorders and depressive symptoms [4, 32–34], of later DSM-IV cluster A, B, or C personality disorder. Overall, these data support a normative increase in borderline personality disorder traits after puberty, perhaps bringing the problems associated with borderline personality disorder to clinical attention. As this wanes in early adulthood, partly due to maturational or socialization processes [4], a group is revealed that is increasingly deviant compared with their peers [35] and perhaps conforms more to the "adult" borderline personality disorder phenotype. This suggests that young people displaying borderline personality disorder features are the major group from which the adult borderline personality disorder phenotype arises.

Heritability estimates for borderline personality disorder (or dimensional representations of borderline personality disorder) range from 35 to 45 % [36]. Experiences of childhood abuse or neglect, problematic family environment, as well as low socioeconomic status are significant risk factors for the development of personality pathology and specifically borderline personality disorder [36]. Prospective, longitudinal data also indicate that certain temperamental characteristics and early-onset mental state or behavioral problems that are analogous to characteristics of borderline personality disorder are precursors to the emergence of the borderline personality disorder phenotype, but do not predict its onset with certainty. However, it is technically imprecise to refer to many of these phenomena as "risk factors" [37], as these same phenomena are later used to define borderline personality disorder. Rather, they are better termed *precursor signs and symptoms* [38]. Typical phenomena include those of attention deficit hyperactivity disorder (ADHD), oppositional defiant disorder (ODD), conduct disorder (CD), substance use, depression, and deliberate self-harm (DSH), along with the actual features of borderline personality disorder [36].

For example, maternal reports of childhood temperament are related to borderline personality disorder in adolescence or adulthood, up to 30 years later [39, 40]. Substance use disorders during adolescence, particularly alcohol use disorders, also specifically predict young adult borderline personality disorder [41, 42], and strong

prospective data demonstrates that disturbances in attention, emotional regulation, and behavior, especially the disruptive behavior disorders (CD, ODD, ADHD) in childhood or adolescence, are independent predictors of young adult borderline personality disorder [40, 43, 44]. Moreover, one study suggests that difficulties with emotion regulation and relationships might precede problems with impulse control in the development of adolescent borderline personality disorder [43].

Deliberate self-harm (DSH) is a core feature of borderline personality disorder [45], and retrospective reports from adults with borderline personality disorder indicate childhood onset of DSH in more than 30 % and adolescent onset in another 30 % [46]. However, DSH is surprisingly under-researched as a potential precursor to borderline personality disorder. Although DSH is relatively common among adolescents and young adults [47] and is associated with a range of clinical syndromes, there is evidence that repetitive DSH, which is less frequent, might differ from occasional DSH [48]. Borderline personality disorder can be diagnosed in the majority of female adolescent inpatients with DSH [49], and the likelihood of meeting the diagnosis of borderline personality disorder is greater in adolescents endorsing both DSH and suicide attempts compared with individuals reporting DSH or suicide attempts alone [50]. Also, the number of borderline personality disorder criteria met is predictive of whether or not an adolescent has engaged in DSH or attempted suicide [51].

The above findings are important because they provide evidence that the features of borderline personality disorder can be reliably and validly detected from at least the pubertal period onwards. However, borderline personality disorder features are often preceded by, accompany, or follow signs and symptoms that are also associated with other mental state disorders (so-called comorbidity), such as mood, anxiety, disruptive behavior, eating, and substance use disorders [19, 27, 52]. Taken together, these signs and symptoms appear from childhood through to adolescence. Many of these resemble aspects of the borderline personality disorder phenotype and presage its later appearance in adolescence or emerging adulthood. However, these factors have limited specificity for borderline personality disorder or other "adult" syndromes.

## *Bipolar Disorder*

Similar to borderline personality disorder, the call for prevention and early intervention for bipolar disorder stems from concern over the consequences of diagnostic and treatment delay [53]. Approximately 70 % of individuals with bipolar disorder will experience their first symptoms before age 25, but there is often a considerable delay before a formal diagnosis is made [54]. Just over half of patients have been reported to be diagnosed in the first year of illness, but a diagnosis can take on average 8 years following the first episode [55, 56]. Also, there is often substantial delay between the onset of bipolar disorder and the introduction of mood-stabilizing medication. Delayed treatment can be linked with adverse outcomes, such as poor psychosocial

adjustment, increased hospitalization and suicide rates, substance use, forensic problems, and failure to achieve developmental milestones [55]. Taken together with evidence that mood stabilizers might have neuroprotective effects that prevent the structural brain changes associated with bipolar disorder, there is a clear rationale for early intervention in this patient group [53].

Children of parents with bipolar disorder are more likely to develop a range of mental disorders, especially affective disorders [57, 58]. Importantly, among the factors that confer an increased risk for a later diagnosis of bipolar disorder are many of the factors associated with borderline personality disorder. These include childhood or familial ADHD [59, 60], traumatic or stressful life events, childhood abuse [58, 61, 62], and substance abuse [63]. Even certain personality traits, such as high harm avoidance and high novelty seeking [64], along with impulsive aggression [58], are associated with later bipolar disorder.

A recent review from our group found 13 retrospective and 12 prospective studies of the period prior to the onset of first-episode mania [56]. Both prospective and retrospective studies highlight that the initial polarity of first illness presentation is more commonly depressive [55]. Retrospective studies have highlighted features such as sub-threshold mania, anger and irritability, lack of sleep, grandiosity, periods of depression, and, to a lesser extent, mood changes. Prospective studies have identified symptoms such as racing thoughts, irritability, anger, periods of depression, mood swings, anxiety, and in some cases psychotic symptoms [56, 65, 66]. The period of prodrome reported in these studies varies widely, from weeks to 15 years. This is in part due to study design, as studies that used samples "enriched" for risk of bipolar disorder reported a shorter time to transition than general samples.

The largest and most rigorous study to examine the incidence of hypomanic and depressive symptoms prospectively from adolescence through to adulthood [67] drew a random representative sample of 14-24 year-olds living in Munich, Germany. After baseline assessment, participants were assessed on 3 occasions over a 7.4–10.6-year period. The findings indicate that it was common for young people to experience hypomanic and depressive symptoms once (almost 40 % of 1,565 participants) over the follow-up period. However, it was far less likely for these symptoms to be experienced multiple times. The persistence of symptoms was more predictive of transition to clinically relevant outcomes (i.e., hypomanic or manic episodes or accessing mental health care) in a dose-dependent manner. The authors conclude that a nonclinical bipolar phenotype might be developmentally common and usually transitory during adolescence. The onset of clinical bipolar disorder is comparatively rare and might be seen as the poor outcome of these developmental processes.

The Course and Outcome of Bipolar Youth (COBY) study prospectively followed 413 7-17 year-olds with "bipolar spectrum" (bipolar I, II, or NOS) disorder over a period of 4 years [68]. This study specifically measured affective phenomena, including mania and depression, but it did not investigate the presence of other disorders. The findings indicate that mixed/cycling and depressive symptoms accounted for the greatest proportion of symptomatology. Rapid mood changes were frequently found, and almost all chronic symptoms reported were of the subsyndromal depressive type. The authors highlight that early onset confers greater likelihood of a chronic

and fluctuating course. While the authors argue that their results support the existence of brief episodes of manic or hypomanic symptoms that are clinically relevant, their failure to measure borderline personality disorder as an outcome or even salient phenomena associated with bipolar disorder renders this conclusion doubtful.

In response to a significant increase in the tendency to diagnose children and young people with bipolar disorder, Leibenluft [69] reviewed the evidence linking mood dysregulation, irritability, and bipolar disorder in young people. She argues that children who present clinically with non-episodic severe irritability are not manic. This is based on diagnostic studies of youth with severe mood dysregulation, where 84 % were found to also meet criteria for lifetime ODD, 86 % lifetime ADHD, 58 % lifetime anxiety disorder, and 16 % lifetime major depressive disorder (MDD). As noted above, these might also be seen as precursor signs and symptoms of borderline personality disorder [36], which was not measured in the studies cited. Leibenluft [69] also concludes that longitudinal studies suggest that severe mood dysregulation does not lead to bipolar disorder but that irritability predicts adult unipolar depression and anxiety disorders. Further to this, young people with irritability do not have high familial rates of bipolar disorder and have a different pathophysiology from youths with bipolar disorder. This review suggests that irritability is a common symptom of childhood and adolescence that has been underresearched. Its clinical presence does not justify a diagnosis of bipolar disorder in young people, as there is no evidence that it leads to adult bipolar disorder. This review underscores that predicting bipolar disorder prospectively, based on specific symptoms, remains fraught.

The problem these studies highlight is that symptoms preceding the first episode of mania lack specificity and sensitivity. Depressive symptoms have high sensitivity but low specificity for bipolar disorder. In contrast, low-grade mood elevation is more specific, but it is not present in all young people who will develop bipolar disorder. In order to balance the need for sensitivity and specificity, a "close-in" strategy (combining known risk factors to "close in" on the target population) [70] was developed by Bechdolf and colleagues [56]. The validity of bipolar at-risk (BAR) criteria was evaluated in a retrospective medical file audit study of nonpsychotic young people aged 15–24 years presenting for intake assessment at a psychiatric service. A total of 173 intake assessments were examined in relation to the BAR criteria. A total of 22 patients met BAR criteria at intake. After a mean period of 265.5 days post intake, 22.7 % ($n=5$) of the BAR group had developed a diagnosis of bipolar disorder, compared with only 0.7 % ($n=1$) in the non-BAR group. The authors concluded that the BAR criteria have some predictive validity in the proximal prodrome of bipolar disorder, and these criteria are currently being tested in a prospective study [56].

Taken together, the above studies indicate that borderline personality disorder and bipolar disorder share numerous distal risk factors and precursor signs and symptoms. Even the presence of specific symptoms of bipolar disorder in childhood and adolescence does not strongly predict the development of bipolar disorder per se. Factors such as the number and frequency symptoms, along with other factors associated with genetic predisposition and environment risk, appear to combine

together to predispose an individual to go on to develop an affective disorder in general and bipolar disorder specifically. Strategies to identify young people at risk of developing bipolar disorder are being developed, but they require further investigation.

## *Unipolar Depression*

The pubertal period is associated with a marked rise in the incidence of depressive symptoms, with 20 % of young people experiencing a diagnosable episode of depression before the age of 18 years [71]. In fact, half of all first episodes of depression occur during adolescence, with an average age of onset of 15 years [72]. Depression during this developmental period has also been associated with increased risk for subsequent episodes and more chronic course [73]. Similar to the other disorders discussed above, adolescent depression is associated with adverse long-term functional and psychiatric outcomes [74]. These include impairment in education, vocation, and interpersonal relationships, substance use, and suicide.

Retrospective studies have investigated the pathways to depression, including risk factors and diagnostic characteristics of people who developed their first episode of depression during adolescence. For example, in a study of 198 women with depression who attended primary care practices [75], those who had their first episode of depression before the age of 16 years were more likely to have attempted suicide, engaged in self-harm, had a history of alcohol abuse, been pregnant as a teenager, and to have had more pervasive personality dysfunction, problems with attention and hyperactivity, and poorer peer relationships. They were also more likely to have experienced poor parental care, physical abuse, interpersonal violence, and childhood sexual abuse.

Another study of 372 adults who were participating in two randomized medication trials for the treatment of depression [76] compared the characteristics of patients according to whether their first episode of depression occurred during childhood, adolescence, or adulthood. They reported that the group who had adolescent-onset depression was significantly more likely to meet criteria for a DSM-IV diagnosis of personality disorder, most commonly avoidant personality disorder, followed by borderline personality disorder. Interpretation of the findings from each of these studies needs to be tempered by the potential for recall bias.

A recent review identified "specific" risk factors for depression that have been associated with increased risk for youth depression in empirical investigations, along with "nonspecific" risk factors that increase risk for a range of disorders, including depression [74]. Specific risk factors included low self-esteem, being female, having a negative body image, poor social support, and ineffective coping, together with having a parent with a depressive illness. However, the foundations for the claim of specificity are weak. For example, having a parent with a depressive illness is also associated with later bipolar disorder and anxiety disorder [58, 77].

Nonspecific risk factors included poverty, exposure to violence, social isolation, child maltreatment, and family breakdown. In contrast, protective factors included

supportive adults, strong family relationships, strong peer relationships, coping skills, and emotional regulation skills, focusing on age-appropriate developmental tasks, on relationships, and on understanding their parent's illness.

Individual differences in temperament, such as high negative emotionality, are also associated with vulnerability to depression and prospectively predict later depression [78]. Moreover, personality disorder and depression have been found to mutually reinforce one another over adolescence and young adulthood [4]. For example, borderline personality disorder traits, identified between ages 14 and 22, were significantly associated with risk for dysthymic disorder or major depressive disorder by a mean age of 33 after controlling for a history of unipolar depression and other psychiatric disorders [79].

Unsurprisingly, unipolar depression shares many distal risk factors and precursor signs and symptoms with borderline personality disorder and bipolar disorder. Depression is a common experience in adolescence, and the outcomes for young people with depressive symptoms might include depression, borderline personality disorder, or bipolar disorder but might also include good mental health. Importantly, the initial polarity of first illness presentation for bipolar disorder is more commonly depressive [55], making the clinical task of treatment initiation for the first presentation of depressive illness challenging.

## *"Comorbidity" in the Clinical Presentation of Borderline Personality Disorder*

One of the pivotal problems when considering the diagnosis of borderline personality disorder is the high degree of co-occurring mental state and personality psychopathology. Empirical data suggest that the constructs of mental state disorders, personality traits, and personality disorders are substantially overlapping [80]. Among those with personality disorders, co-occurrence of mental state disorders and other personality disorders is common in both clinical and community settings. This is most striking for borderline personality disorder, where co-occurring mental state and personality disorders are the norm [81, 82]. In a nationally representative survey of adults (aged 18 years and older) in the United States, 84.5 % of those with borderline personality disorder met criteria for one or more mental state disorders in the past 12 months, with a mean of 3.2 mental state disorders [83]. Viewed from another perspective, 25.2 % of those with any mental state disorder in the previous 12 months also met criteria for at least one personality disorder. It is possible that, rather than being an artifact of the diagnostic system or an inconvenience, the tendency for mental disorders to co-occur might in fact be a predictable consequence of the involvement of common liability factors for multiple disorders [84].

This pattern of co-occurrence has been found to be similar in young people in community and clinical settings. In the Children in the Community study, the long-term prognoses for DSM-IV Axis I and Axis II disorders were of comparable magnitude and often additive when co-occurring [28]. Axis I (mood, anxiety, dis-

ruptive behavior, and substance use disorders) and Axis II disorders in adolescence showed risks for negative prognoses lasting 20 years. Co-occurring Axis I and Axis II disorders consistently presented the highest risk, at least the sum of the risk for each axis or even several times the risk of disorders in either axis alone.

In a clinical study comparing adolescent outpatients with borderline personality disorder, those with other personality disorders, and those with no personality disorder, those with borderline personality disorder had a significantly greater burden of co-occurring mood (59 %), anxiety (46 %), disruptive behavior (70 %), and substance use disorders (35 %) [19]. Similarly, in a sample of female adolescent inpatients with borderline personality disorder, the most frequent mental state disorders were mood (22 %), eating disorders (16 %), dissociative/somatoform (13 %), and substance use disorders (10 %) [27]. This pattern of co-occurrence in inpatients is similar to, but lower than, that found in adult samples. In this sample, 38.7 % of patients had one or more co-occurring personality disorders. The most common were cluster C (avoidant, dependent, obsessive-compulsive), followed by Cluster A (paranoid) [27]. Taken together, these studies show that the clinical presentation of borderline personality disorder is often associated with the presence of affective symptoms and other psycho-pathology.

## *The Relationship Between Borderline Personality Disorder and Mood Disorders*

The prominence of affective criteria in the DSM diagnosis of borderline personality disorder and the significant co-occurrence of affective disorders (including bipolar I, bipolar II, major depression, and dysthymic disorder) in patients who have borderline personality disorder have fueled debate about whether borderline personality disorder should be conceptualized as a mood disorder [85]. It is beyond the scope of this chapter to review this literature, which has mainly been conducted in adults and which will be covered elsewhere in this book. Rather, relevant literature pertaining to these issues in young people will be covered.

## *Borderline Personality Disorder and Bipolar Disorder*

Bipolar disorder and borderline personality disorder might be confused clinically because of the diagnostic criteria themselves. Many of the criteria for borderline personality disorder and bipolar disorder in the DSM-IV and its predecessors are related to mood instability [86]. Paris, Gunderson, and Weinberg [85] comprehensively explored the hypothesis that borderline personality disorder was in fact a bipolar spectrum disorder and argued that, more often than not, borderline personality disorder remains distinct from bipolar disorders cross-sectionally and over time. However, Barroilhet and colleagues have argued that the clinical debate about

overlap is scientifically false because the "core" features of mood lability and impulsivity are not central to either disorder [87]. They argue that bipolar disorder is primarily a disorder of psychomotor activation and that the borderline personality disorder criteria of abandonment, identity disturbance, recurrent suicidal or self-mutilating behavior, and dissociative symptoms distinguish borderline personality disorder from bipolar disorder.

Other authors have pointed to the importance of the nature of affect, which has a different time course and quality in borderline personality disorder compared with bipolar disorder. In contrast to the slower time course of affective change in bipolar disorder, borderline personality disorder affect is subject to rapid and chaotic changes over minutes, hours, or days [88], more commonly shifts between euthymia and anger [89], and is often triggered by environmental (especially interpersonal) factors [88].

While the hypothesis that borderline personality disorder is a bipolar disorder spectrum disorder is based largely on the observation of unstable mood, there is little research to support this idea [7]. One study sought to address the difficulty of differentiating between early bipolar disorder and borderline personality disorder in 87 depressed young people recruited from consecutive referrals to a psychiatric clinic [90]. The study aimed to measure borderline personality disorder pathology during an index depressive episode and to compare three diagnostic groups: bipolar disorder ($n=14$), "bipolar spectrum disorder" ($n=27$), and MDD ($n=46$). No participant met full diagnostic criteria for a personality disorder. Both of the bipolar-depressed groups reported significantly higher median levels of borderline characteristics than the MDD group. Three of the borderline characteristics emerged as potentially useful in differentiating bipolar depression from unipolar depression: "I've never threatened suicide or injured myself on purpose," "I have tantrums or angry outbursts," and "Giving in to some of my urges gets me into trouble." They conclude that certain borderline personality disorder screening questions that reflect cyclothymic characteristics or depressive mixed states might be of practical use to clinicians in helping to differentiate between bipolar depression and unipolar depression in young adults and that borderline personality disorder in early-onset depression is predictive of ultimate bipolar outcome. Among the major limitations to this study are the reliance on the screening questionnaire of the International Personality Disorders Examination, which does not perform well in young outpatients [20], the absence of any case level borderline personality disorder, and the fact that the diagnostic criteria for "bipolar spectrum disorder" are not validated.

Another study [91] investigated young people and young adults with early onset of bipolar disorder. They found that among this sample of 100 young people aged 15–36 years, greater comorbidity increased the risk of self-harm and suicide. A comorbid diagnosis of borderline personality disorder significantly increased the risk for self-harm but not suicide attempts. The most important finding from this study was that early onset of bipolar disorder was associated with the highest risk of self-harm and suicide attempts. This is supported by evidence that anxiety, concentration difficulties, antisocial behavior, and substance use are present in the early stages of bipolar disorder and correlate with an unfavorable course [92, 93].

These studies suggest that care needs to be taken to use all available diagnostic data when making a clinical assessment. Current research findings in young people are of limited direct application to everyday clinical practice. It is important to recognize that it is the nature and context of mood regulation difficulties that are paramount in distinguishing these disorders and that certain characteristics might aid this such as psychomotor activation or mood elevation for bipolar disorder, or abandonment, identity disturbance, recurrent suicidal or self-mutilating behavior, and dissociative symptoms for borderline personality disorder. Co-occurrence of bipolar disorder and borderline personality disorder is possible and appears to heighten the risk of self-harm or suicide.

### *Borderline Personality Disorder and Depression*

The high prevalence of co-occurring depressive symptoms in young patients with borderline personality disorder [19] can potentially mask the presence of a personality disorder. In fact, borderline personality disorder and major depressive disorder are the only two disorders in the DSM-5 that include suicidal ideation or attempts in their diagnostic criteria. Although a great deal of research has been conducted on the subject of borderline personality disorder and depression in adults [94] and is covered elsewhere in this book, it is unclear how these findings apply to young people. This topic has received comparatively little attention in young people, especially in clinically applied research. It seems that the primary task is to encourage clinicians to even consider a diagnosis of borderline personality disorder in a young person presenting with depression. Clinical experience suggests that a common reason for not making a borderline personality disorder diagnosis in young people is that appropriate questions are never asked. As with the comparison between bipolar disorder and borderline personality disorder, the nature of affective symptoms potentially differs in borderline personality disorder in young people, and this is likely to have important implications for treatment and prognosis.

## Conclusion

Borderline personality disorder has been shown to be a reliable and valid disorder in adolescents and young adults. Borderline- and mood-related psychopathology become clinically prominent across the same developmental period, from puberty through to young adulthood, and they frequently co-occur. Borderline personality and mood disorders share many common risk factors and precursors, rendering this aspect of clinical history taking of limited specificity. While the longitudinal outcomes for individuals presenting with such psychopathology are highly variable, evidence suggests that borderline- and mood-related psychopathology can intensify and/or mutually reinforce one another across this developmental period, possibly

crossing the threshold for a syndromal diagnosis. Regardless of whether an individual crosses such an arbitrary threshold, a substantial proportion of individuals will develop significant and persistent functional, vocational, and interpersonal impairment and disability.

Clearly, there is a need for intervention early in the course of these disorders, but the challenge is to balance the sensitivity and specificity of any early detection program. Effective early intervention improves the developmental and functional outcomes for these individuals. This must be balanced with the risk of diagnostic foreclosure, which can lead to the misapplication of diagnostic labels, stigma, inappropriate treatment, and other adverse outcomes.

## *Clinical Staging: A Heuristic and Pragmatic Framework to Guide Intervention*

How might the above knowledge be integrated and applied in clinical practice? In adult psychiatric practice, the debate is often framed around the under-recognition of bipolar disorder or borderline personality disorder in people presenting for treatment of depression [95]. The reification of each separate syndrome leads to implications that one clinician or another is missing an "obvious case" and has foolishly applied the "wrong" treatment or is denying much needed specific treatment [7, 96].

A key problem in youth is the excessive focus upon each of these areas of risk research as separate domains in retrospective studies. In both bipolar disorder and borderline personality disorder, patients might present as depressed, experience mood changes, have early age of onset, have a history of abuse, engage in substance abuse, have impulsive behaviors, engage in self-harm, and have other comorbid disorders [97].

Critically, in youth mental health, patients most frequently present with admixtures of symptoms and a dynamic, evolving and uncertain clinical picture. A key problem, shared with adult psychiatry, appears to be that patients who present with depression are not further questioned as to the presence of symptoms of mania or hypomania [86] or borderline personality disorder [13].

Another key issue is disproportionate thinking with regard to intervention, with undue emphasis placed upon applying the most intensive interventions for adult phenotypes of the disorders (often pharmacotherapeutic) as first-line interventions [69] and a lack of emphasis upon psychosocial interventions. This is exemplified in the discussion about initiation of mood-stabilizing medications. On the one hand, there is a risk of medicating what might be a developmentally common and usually transitory nonclinical bipolar phenotype [67]. On the other hand, delay in initiation of mood stabilizers might diminish potential neuroprotective effects [53]. Furthermore, whatever the reasons for initiation of second-generation antipsychotic medications, there is evidence that longer-term harms might outweigh any benefits in young

people [98], especially when taking into account the lack of evidence for the effectiveness of these agents in bipolar II disorder or borderline personality disorder.

An alternative to the diagnostic category approach to prevention and early intervention is to develop a range of risk syndromes or warning signs for the development of a range of disorders [6, 99]. Key to this cross-diagnostic, "clinical staging" [100] approach is eschewing diagnostic categories and arbitrary age restrictions in favor of a focus on the severity and persistence of symptoms, the need for care, and the proportionality of any intervention.

Clinical staging involves mapping the development, progression, and extension of mental disorders over time and is essentially a more refined form of diagnosis. It is analogous to disease staging in general medicine. Its value is recognized in the treatment of malignancies and other potentially severe medical illnesses, where limiting the extension and secondary impacts of the disease, and improving quality of life and survival, all rely on the earliest possible delivery of effective interventions.

Clinical staging offers an integrating framework that is potentially more useful in determining which and what type of treatment will be most effective during a particular stage of disorder. Treatment needs will differ by phase or stage of disorder, with the possibility that interventions might be more benign and/or effective in earlier stages of disorder. Clinical staging is also much more consistent with evidence from developmental psychopathology that there are many paths to the development of disorders (equifinality) and diverse outcomes (multifinality) for those presenting with psychopathology [101].

Clinical staging differs from conventional diagnostic practice in that it defines not only the extent of progression of a disorder at a particular point in time but also where a person lies currently along the continuum of the course of an illness. The differentiation of early and milder clinical phenomena from those that accompany illness extension, progression, and chronicity lies at the heart of the concept, which makes it especially useful.

Table 9.1 illustrates the application of clinical staging, with a potential model for assessment of and intervention for mood disorders and borderline personality disorder (adapted from [53, 102]). This model recognizes the commonality of many of the risk factors for these disorders, their shared precursor symptoms and syndromes, and the diverse developmental pathways that any individual might take, especially those with an early stage disorder. Crucially, this framework outlines a proportionate clinical response to each stage of disorder. Suggested interventions are simpler and more benign during early stages of disorder (stages 0 and 1) and increase in intensity (and potential adverse effects) with disorder progression. In later stages of a disorder (stages 3 and 4), the risk of adverse effects becomes more justified when compared with the risk of not treating the disorder.

Many of the interventions suggested for early stages of disorder already exist, but their outcomes have not been assessed when used in this proposed model. Interventions for stages 1b and 2 are early in their development. Psychosocial interventions in youth include the Helping Young People Early (HYPE) program for borderline personality disorder [103], along with psychosocial interventions for bipolar disorder [104] and unipolar depression [105]. Low toxicity, novel

**Table 9.1** A potential clinical staging model for bipolar disorder and borderline personality disorder

| Clinical stage | Definition | Potential interventions |
|---|---|---|
| 0 | Increased risk of severe mood disorder or borderline personality disorder (e.g., family history, exposure to abuse or neglect, substance use) | Mental health literacy |
| | No specific current symptoms | Self-help |
| 1a | Mild or nonspecific symptoms of mood disorder or borderline personality disorder (e.g., disturbances in attention, emotional regulation, and behavior) | Formal mental health literacy |
| | | Family psychoeducation, parenting skills |
| | | Substance abuse reduction |
| | | Supportive counseling/problem solving |
| 1b | Sub-threshold features of mood disorder or borderline personality disorder | 1a plus phase-specific psychosocial intervention (e.g., cognitive behavioral therapy, HYPE early intervention for borderline personality disorder [103]) |
| 2 | First episode of threshold mood disorder or borderline personality disorder | 1b and case management, educational/vocational intervention/rehabilitation, family psychoeducation and support, specific time-limited psychotherapy, specific and targeted pharmacotherapy (e.g., mood stabilizer) |
| 3a | Recurrence of sub-threshold mood or borderline personality disorder symptoms | 2 and emphasis on maintenance medication and psychosocial strategies for full remission |
| 3b | First threshold relapse of mood disorder or borderline personality disorder | 3a and relapse prevention strategies |
| 3c | Multiple relapses of mood disorder or borderline personality disorder | 3b and combination mood stabilizers, intensive psychosocial interventions (e.g., dialectical behavior therapy) |
| 4 | Persistent unremitting disorder | 3c and clozapine and other tertiary therapies, social participation despite disability |

Adapted from [53, 102]

pharmacotherapies might also be appropriate for stages 1b and 2. Examples include *N-acetylcysteine* for bipolar disorder [106] or omega-3 fatty acids, which have evidence to support their use in both mood and borderline personality disorders from stage 2 onwards [107–109].

This clinical staging model for mood and borderline personality disorders will necessarily evolve and become more sophisticated with evolving knowledge about developmental pathways for these disorders (including indicative biological and endophenotypic markers) and novel interventions. It provides a starting point for both diagnosis and treatment development.

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