

Prevention and early intervention for borderline personality disorder

Andrew M Chanen, Louise K McCutcheon, Martina Jovev, Henry J Jackson and Patrick D McGorry

Borderline personality disorder (BPD) is a severe mental disorder, characterised by a pervasive pattern of instability in affect regulation, impulse control, interpersonal relationships, and self-image¹ (Box). BPD affects about 1.4% of the general population,² but it is the most common and the most serious of the personality disorders (PDs) in clinical practice, affecting up to 10% of psychiatric outpatients and 20% of inpatients.¹ BPD is associated with severe psychosocial impairment and morbidity, greater usage of mental health resources, and a high mortality rate.^{1,2} These data make a compelling case for the development of empirically tested prevention and early intervention programs.¹

Rationale for prevention and early intervention

Diagnosing BPD in adolescence

BPD usually emerges during adolescence, and adolescents with BPD commonly seek help.^{3,4} However, the condition often goes unrecognised,⁴ because diagnosis of PD in this age group is controversial.⁵ Nevertheless, a substantial body of evidence indicates that the diagnostic criteria for BPD (and other PDs) are as reliable, valid and stable before age 18 years as they are in adulthood.^{4,6,7} Importantly, BPD in adolescence is associated with serious morbidity⁴ that appears to persist for decades.⁸

BPD is conservatively estimated to affect between 0.9%⁹ and 3%¹⁰ of community-dwelling teenagers (similar to the prevalence in adults²), with more liberal definitions (lower symptom thresholds) yielding a prevalence of up to 11%–14%.^{10,11} Mean levels of BPD traits are highest in early adolescence and decline for most people at least into their late 20s,⁸ leaving in their wake a subgroup with high levels of BPD traits and disability.¹² BPD traits in young people also show considerable flexibility and malleability,¹³ making this a key period in which to intervene.

Psychosocial functioning and longitudinal outcome of BPD in young people

Although the natural history of BPD traits in adolescence is toward attenuation over subsequent years, this does not imply “recovery”. Adolescents with BPD have been found to have the broadest range of functional impairment of all PDs on measures of social impairment, school or work problems, psychiatric symptoms and antisocial behaviour.¹⁰ Also, our group has shown that the BPD diagnosis defines a group of adolescent patients with the highest levels of psychopathology and the most severe psychosocial dysfunction (a pattern similar to that found in studies of adults with BPD), compared with adolescents with other PDs or without PD.⁴ Moreover, in this study, BPD was a significant predictor of psychiatric symptoms and adaptive functioning, over and above Axis I disorders (eg, depression, substance use) and other PD diagnoses, indicating that BPD in adolescence is not reducible to Axis I diagnoses.

Wide-ranging prospective data from the Children in the Community (CIC) Study⁸ indicate that high symptom levels of any PD (including BPD) in adolescence have negative repercussions over the

ABSTRACT

- Borderline personality disorder (BPD) is a severe mental disorder that is associated with substantial psychosocial impairment and morbidity, disproportionate use of health resources, a high suicide rate, and a reputation for being “untreatable”.
- A diagnosis of BPD in young people has similar reliability, validity and prevalence to BPD in adults, and almost certainly has serious and pervasive negative repercussions over subsequent decades.
- Current data are inadequate to inform specific *universal* or *selective* prevention programs for BPD. However, they do support including BPD prevention as an outcome when evaluating universal and/or selective interventions for a variety of mental health problems and adverse psychosocial outcomes.
- The strongest data support *early intervention* for the emerging BPD phenotype. Early intervention programs will need to be realistic in their aims, require change in clinician attitudes and service systems, and must be mindful of the risk of iatrogenic harm.

MJA 2007; 187: S18–S21

subsequent 10–20 years, and that these repercussions are often more serious or pervasive than those associated with Axis I disorders. In many cases, PDs might account for the long-term impairment associated with Axis I disorders, with which they often co-occur.

Elevated BPD symptom levels in adolescence have been shown to be an independent risk factor for substance-use disorders during early adulthood.¹⁴ Furthermore, Cluster B (borderline, antisocial, narcissistic and histrionic) PD symptoms in adolescence increase the risk of violent behaviour, which also persists into early adulthood.¹⁵ In a community sample of 16–19-year-old women, Cluster B PD symptoms were associated with increases in depressive symptoms over a 2-year period.¹⁶ Also, at the 2-year follow-up, former adolescent inpatients with PDs (50% were diagnosed with BPD) used more illicit drugs and required more inpatient treatment than adolescent inpatients without PDs.¹⁷ BPD symptoms at 22 years of age are also independently associated with significant reductions in quality of life 11 years later.¹⁸ Moreover, BPD symptoms during the transition to early adulthood predict romantic dysfunction over a 4-year period (romantic chronic stress, conflicts, partner dissatisfaction, abuse, and unwanted pregnancy), although the associations were not unique to BPD.¹⁹ They also predict greater conflict with romantic partners.²⁰

Prospective risk factors

Publications from the CIC Study have identified childhood risk factors for any PD in young adults.⁸ However, data on true causal risk factors for BPD (ie, prospectively assessed factors that precede the emergence of the BPD phenotype²¹) are meagre.

Diagnostic and statistical manual of mental disorders 4th edition (DSM-IV) criteria for borderline personality disorder (adapted by Lieb and colleagues)¹

Affective criteria

- Inappropriate intense anger or difficulty controlling anger (eg, frequent displays of temper, constant anger, recurrent physical fights)
- Chronic feelings of emptiness
- Affective instability due to a marked reactivity of mood (eg, intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days)

Cognitive criteria

- Transient stress-related paranoid ideation or severe dissociative symptoms
- Identity disturbance: striking and persistent unstable self-image or sense of self

Behavioural criteria (forms of impulsivity)

- Recurrent suicidal behaviour, gestures, or threats, or self-mutilating behaviour
- Impulsivity in at least two areas that are potentially self-damaging that do not include suicidal or self-mutilating behaviour

Interpersonal criteria

- Frantic efforts to avoid real or imagined abandonment that do not include suicidal or self-mutilating behaviour
- A pattern of unstable and intense interpersonal relationships characterised by alternating between extremes of idealisation and devaluation

* Five of the nine criteria are required to diagnose borderline personality disorder.

Reprinted from *The Lancet* (Lieb K, Zanarini MC, Schmahl C, et al. Borderline personality disorder. *Lancet* 2004; 364: 454). Copyright 2004, with permission from Elsevier. ♦

Childhood abuse, although common in BPD, is neither necessary nor sufficient for the development of BPD.²² However, in the only prospective studies of risk factors for specific PDs, the CIC group found that officially documented physical or sexual abuse or neglect in children were each associated with elevated BPD symptom levels during early adulthood.²³ They also found that maternal inconsistency in childrearing predicted the persistence or emergence of BPD (but not of any other PD) 2.5 years later, but only in the presence of high levels of maternal overinvolvement.²⁴ Most recently, the CIC Study reported that, when childhood behavioural or emotional problems and parental psychiatric disorders were controlled for statistically, 10 types of parenting behaviour, evident during the childrearing years, were prospectively associated with an elevated risk of PD in the children of these parents on reaching adulthood.²⁵ Moreover, aversive parental behaviour and low levels of parental affection or nurturing during the childrearing years were each associated with several specific PDs, including BPD.

Precursor signs and symptoms

There are few signs and symptoms that predict the onset of any mental disorder with certainty. The signs and symptoms from a

diagnostic cluster that precede a disorder but do not predict its onset with certainty are termed *precursor signs and symptoms*.²⁶

Childhood or adolescent disruptive behaviour disorders⁸ and depressive symptoms^{8,9} have been identified as predictors of young adult PD of any type. Substance-use disorders during adolescence, particularly alcohol-use disorders, are one of the few specific predictors of young adult BPD.²⁷ Critically, the only study to have measured childhood or adolescent PD, as a predictor of later PD, found that symptoms of PD were the strongest predictors of later PD, over and above disruptive behaviour disorders and depressive symptoms,⁸ although the predictions are at the cluster level, and not for individual PDs (*Diagnostic and statistical manual of mental disorders*, 4th edition [DSM-IV]). This same sample showed an increasing skew in the distribution of data over time,¹² suggesting that adolescents with elevated BPD trait levels are an important group, possibly the most important group, from which adult BPD arises, although this is unlikely to represent the only pathway to adult BPD.

Specialised interventions

Historically, clinicians have accepted the intractability of BPD and its poor outcome. However, the emerging controlled trial literature for BPD (reviewed by Lieb et al¹ and Binks et al²⁸) has begun to counteract these beliefs. Recent data from well designed, “second generation” studies report positive outcomes (fewer suicidal behaviours, less emergency department use, and fewer hospitalisations²⁹) for specialised interventions that might be successfully adapted for use in prevention and early intervention. To our knowledge, our group has conducted the only randomised controlled early intervention trial specifically for BPD, with preliminary results favouring a specialised intervention, based on cognitive analytic therapy, over manual-based good clinical care.³⁰

A proposal for prevention and early intervention

Universal and selective prevention

The data given above describing specific risk factors, pathways or mechanisms for the development of BPD are inadequate, so that currently it is not feasible to use these as a basis for preventive strategies. Moreover, it is difficult to translate many of these findings into meaningful targets for intervention, as many risk factors are fixed exposures, or require major social policy and economic changes with a long timetable for implementation, if they are to occur at all. Also, not only are these risk factors associated with diverse outcomes other than BPD, but most people exposed to these risk factors, such as early trauma, do not develop psychopathology, let alone BPD.^{8,22} Therefore, interventions aimed at reducing exposure to these factors (*universal prevention*²¹), or targeting those exposed to them (*selective prevention*²¹), must have broader aims than the prevention of BPD alone. Interventions should include the full range of psychopathology and the adverse outcomes associated with these risk factors, and existing interventions for mental disorders and social problems might usefully measure BPD as an outcome.

Indicated prevention and early intervention

Targeting groups with precursor signs and symptoms (*indicated prevention*²¹) appears feasible using the available data. However, this would still need to focus on diverse outcomes (albeit with a

narrower focus than universal or selective programs) that include BPD. The data pertaining to precursor signs and symptoms improve our capacity to focus on clinically relevant syndromes, but still do not allow a specific or specialised focus on BPD (measured dimensionally or categorically) or the traits underlying BPD.

A diagnosis of BPD in adolescence appears to be as valid and reliable as it is in adulthood, and young people with BPD seek clinical help, even if their condition is unrecognised by clinicians.^{3,4} Furthermore, adolescents displaying BPD traits form the major group from which the young adult BPD phenotype arises.¹² These findings make early intervention for first presentation BPD the “best bet” for immediate action. Research studies could be mounted immediately, using available interventions and resources that already exist in many health systems in industrialised countries.

Risks and benefits of early intervention

Early intervention for BPD holds great promise, but it also has the potential to be undermined by unrealistic expectations. Possible aims might include ameliorating borderline and/or general psychopathology, improving psychosocial functioning, along with reducing risks for Axis I disorders, violence, offending behaviour, suicide, self-harm and interpersonal conflict. Other goals might include reducing health service use and iatrogenic complications, and avoiding the heavy dependency on the health system that is characteristic of patients with chronic BPD. This might require specific professional training programs, challenging clinicians' attitudes and defensive practices, as well as public “mental health literacy” campaigns.

These potential benefits must be weighed up against the potential risks. It is unclear whether detection and intervention will always bring benefits, as BPD is a highly stigmatised label, with the potential for iatrogenic harm.³¹ It is important not only to avoid the family-blaming of bygone eras, but also to respect, involve, and provide support to families. Finally, cost-effectiveness will also need to be demonstrated.

Acknowledgements

This work was supported in part by Grant 98-0198 from the Victorian Health Promotion Foundation and Grant 990748 from the National Health and Medical Research Council. The ORYGEN Research Centre is supported by funding from the Colonial Foundation, Melbourne, Australia.

Competing interests

None identified.

Author details

Andrew M Chanen, MB BS, MPM, FRANZCP, Senior Lecturer,¹ Associate Medical Director²

Louise K McCutcheon, DPsych, MAPS, Research Fellow,¹ HYPE Clinic Coordinator²

Martina Jovev, MA(ClinPsych), PhD, Research Fellow¹

Henry J Jackson, PhD, FAPS, Professor and Head³

Patrick D McGorry, MD, PhD, FRCP, FRANZCP, Professor of Youth Mental Health, and Executive Director^{1,2}

1 ORYGEN Research Centre, University of Melbourne, Melbourne, VIC.

2 ORYGEN Youth Health, Melbourne, VIC.

3 School of Behavioural Science, University of Melbourne, Melbourne, VIC.

Correspondence: achanen@unimelb.edu.au

References

- Lieb K, Zanarini MC, Schmahl C, et al. Borderline personality disorder. *Lancet* 2004; 364: 453-461.
- Lenzenweger MF, Lane MC, Loranger AW, Kessler RC. DSM-IV personality disorders in the national comorbidity survey replication. *Biol Psychiatry* 2007; Jan 8 [Epub ahead of print].
- Zanarini MC, Frankenburg FR, Khera GS, et al. Treatment histories of borderline inpatients. *Compr Psychiatry* 2001; 42: 144-150.
- Chanen AM, Jovev M, Jackson HJ. Adaptive functioning and psychiatric symptoms in adolescents with borderline personality disorder. *J Clin Psychiatry* 2007; 68: 297-306.
- Paris J. Personality disorders over time: precursors, course and outcome. *J Personal Disord* 2003; 17: 479-488.
- Westen D, Shedler J, Durrett C, et al. Personality diagnoses in adolescence: DSM-IV axis II diagnoses and an empirically derived alternative. *Am J Psychiatry* 2003; 160: 952-966.
- Chanen AM, Jackson HJ, McGorry PD, et al. Two-year stability of personality disorder in older adolescent outpatients. *J Personal Disord* 2004; 18: 526-541.
- Cohen P, Crawford TN, Johnson JG, et al. The children in the community study of developmental course of personality disorder. *J Personal Disord* 2005; 19: 466-486.
- Lewinsohn PM, Rohde P, Seeley JR, et al. Axis II psychopathology as a function of axis I disorders in childhood and adolescence. *J Am Acad Child Adolesc Psychiatry* 1997; 36: 1752-1759.
- Bernstein DP, Cohen P, Velez CN, et al. Prevalence and stability of the DSM-III-R personality disorders in a community-based survey of adolescents. *Am J Psychiatry* 1993; 150: 1237-1243.
- Chabrol H, Montovany A, Chouicha K, et al. Frequency of borderline personality disorder in a sample of French high school students. *Can J Psychiatry* 2001; 46: 847-849.
- Crawford TN, Cohen P, Johnson JG, et al. Self-reported personality disorder in the children in the community sample: convergent and prospective validity in late adolescence and adulthood. *J Personal Disord* 2005; 19: 30-52.
- Lenzenweger MF, Castro DD. Predicting change in borderline personality: using neurobehavioral systems indicators within an individual growth curve framework. *Dev Psychopathol* 2005; 17: 1207-1237.
- Cohen P, Chen H, Crawford TN, et al. Personality disorders in early adolescence and the development of later substance use disorders in the general population. *Drug Alcohol Depend* 2007; 88 Suppl 1: S71-S84.
- Johnson JG, Cohen P, Smailes E, et al. Adolescent personality disorders associated with violence and criminal behavior during adolescence and early adulthood. *Am J Psychiatry* 2000; 157: 1406-1412.
- Daley SE, Hammen C, Burge D, et al. Depression and axis II symptomatology in an adolescent community sample: concurrent and longitudinal associations. *J Personal Disord* 1999; 13: 47-59.
- Levy KN, Becker DF, Grilo CM, et al. Concurrent and predictive validity of the personality disorder diagnosis in adolescent patients. *Am J Psychiatry* 1999; 156: 1522-1528.
- Chen H, Cohen P, Crawford TN, et al. Relative impact of young adult personality disorders on subsequent quality of life: findings of a community-based longitudinal study. *J Personal Disord* 2006; 20: 510-523.
- Daley SE, Burge D, Hammen C. Borderline personality disorder symptoms as predictors of 4-year romantic relationship dysfunction in young women: addressing issues of specificity. *J Abnorm Psychol* 2000; 109: 451-460.
- Chen H, Cohen P, Johnson JG, et al. Adolescent personality disorders and conflict with romantic partners during the transition to adulthood. *J Personal Disord* 2004; 18: 507.
- Mrazek PJ, Haggerty RJ, editors. Reducing risks for mental disorders: frontiers for preventive intervention research. Washington, DC: National Academy Press, 1994.
- Paris J. Does childhood trauma cause personality disorders in adults? *Can J Psychiatry* 1998; 43: 148-153.
- Johnson JG, Cohen P, Brown J, et al. Childhood maltreatment increases risk for personality disorders during early adulthood. *Arch Gen Psychiatry* 1999; 56: 600-606.
- Bezirgianian S, Cohen P, Brook JS. The impact of mother-child interaction on the development of borderline personality disorder. *Am J Psychiatry* 1993; 150: 1836-1842.

WHAT'S THE EVIDENCE? EARLY INTERVENTION IN YOUTH MENTAL HEALTH

- 25 Johnson JG, Cohen P, Chen H, et al. Parenting behaviors associated with risk for offspring personality disorder during adulthood. *Arch Gen Psychiatry* 2006; 63: 579-587.
- 26 Eaton WW, Badawi M, Melton B. Prodromes and precursors: epidemiologic data for primary prevention of disorders with slow onset. *Am J Psychiatry* 1995; 152: 967-972.
- 27 Thatcher DL, Cornelius JR, Clark DB. Adolescent alcohol use disorders predict adult borderline personality. *Addict Behav* 2005; 30: 1709-1724.
- 28 Binks C, Fenton M, McCarthy L, et al. Psychological therapies for people with borderline personality disorder. *Cochrane Database Syst Rev* 2006; (1): CD005652.
- 29 Linehan MM, Comtois KA, Murray AM, et al. Two-year randomized controlled trial and follow-up of dialectical behavior therapy vs therapy by experts for suicidal behaviors and borderline personality disorder. *Arch Gen Psychiatry* 2006; 63: 757-766.
- 30 Chanen AM, Jackson HJ, McCutcheon L, et al. A randomised controlled trial of psychotherapy for early intervention for borderline personality disorder [abstract]. *Acta Neuropsychiatrica* 2006; 18: 319.
- 31 Fonagy P, Bateman A. Progress in the treatment of borderline personality disorder. *Br J Psychiatry* 2006; 188: 1-3.

(Received 13 Mar 2007, accepted 29 May 2007)

□