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An Update on Borderline Personality Disorder: Life in the Fast Lane

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ABSTRACT:

An update on borderline personality disorder: life in the fast lane

Several studies have been conducted for a long time to identify the borderline personality and to elucidate its distinctive characteristics from other psychopathologies. However, the different findings obtained in these studies carried out provided findings that this disorder is not yet understood sufficiently. Therefore, studies about the prevalence, the comorbidity, causative factors and treatment approaches of borderline personality disorder are of vital importance. Moreover, studies about suicidality among BPD patients also have a separate importance because repetitive suicidal behaviors complicate the medical care significantly. In this review, we aimed to reevaluate the recent studies conducted on the diagnosis, the prevalence, the comorbidity, causative factors, and treatment of borderline personality disorder.

Keywords: borderline personality disorder, etiology, comorbidity, suicidality, treatment

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INTRODUCTION

Borderline personality disorder (BPD) is frequently seen in psychiatric clinical practice and viewed as some of the most difficult and troubling problems in clinical psychiatry. The BPD is characterized by maladaptive personality characteristics evident with emotion dysregulation, impulsivity, risk-taking behavior, irritability, feelings of emptiness, self-injury and fear of abandonment, as well as unstable interpersonal relationships.

Kernberg (1) worked to define the borderline personality and to elucidate the distinctive features from other psychopathologies. Kernberg used the term Borderline Personality Organization to describe the disorder and to describe patients whose psychotic organization was intense while their neurotic organization was slight. This organizational structure resides within all personality disorders and is generally distinguished by three distinctive features. These are Identity disintegration, primitive defense mechanisms, and disturbances in the evaluation of truth and the weak self. Identity disintegration occurs when a defect occurs in the integration of self with objects (1). With the publication of the Third Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III), borderline personality disorder has become a diagnosis based on the systematic identification of observable clinical features (2).

Borderline personality disorder (BPD) was initially described as a severe, chronic, and untreatable disease with poor prognosis. However, there have been serious changes in this perception after four important retrospective 15-year follow-up studies during 1980s (3-6). In a 27-year follow-up study by Paris and Zweig-Frank, a lower number of patients

who still meet the diagnostic criteria for BPD were observed compared to the 15-year follow-up (7). In other words, the remission rate found to be increased when compared to prior 15-year follow-up studies. This study also demonstrated the importance of continuing affective symptoms and higher risk of suicide in patients with borderline personality disorder. The total percentage of suicides has reached 10.3% in 27 years (17 of the 165 subjects) (7).

With a better recognition of Borderline personality disorder, the information obtained about comorbidity and differential diagnoses, and the development of new therapies and programs in the treatment, significant progress has been made in the prognosis of the disorder. Two 10-year follow-up studies by Gunderson et al. (8) and Zanarini (9) reported higher rates of remission, lower rates of relapse, and severe and persistent impairment in social functioning. In support, the results of a more recent 10-year follow-up study conducted by Alvarez- Tomás and colleagues in a Spanish sample revealed that half of the patients who had diagnosis of BPD at the beginning of the study did not meet criteria for PBD at 10 years (10). However, like prior studies, Alvarez- Tomás et al. also observed a reduction in general activity (functioning) and social life despite a marked improvement in psychiatric symptoms of BDP such as emotional dysregulation, affective instability, and impulsivity (10).

Diagnosis Characteristics over Time

The diagnosis of Borderline personality disorder, which has evolved continuously up to DSM-5, is based on the studies of the end of the 1970's. Gunderson and Kolb identified seven characteristics that characterize borderline personality disorder in order to reliably distinguish BPD from depression and schizophrenia (11). An additional characteristic about identity disruption and these seven characteristics were formed criteria of borderline personality disorder diagnosis in the Diagnostic and Statistical Manual of Mental Disorders (3rd edition) (2). Furthermore, a criterion about the psychotic-like experiences was included in the DSM-IV as the ninth criterion for BPD. After that, there were no substantial

Table 1: Borderline personality disorder DSM-5 criteria

Personality Functioning	Self-Functioning	**Identity**	Unstable ideas about self-image, excessive self-criticism, feeling of emptiness
		Self-direction	Unstable ideas about personal goals, values, and future plans
	Interpersonal Functioning	**Empathy**	Lowered empathy ability, negative perceptions about others attributes and vulnerabilities
		Intimacy	Extremes of idealization and devaluation of close relationships and different attitudes between over involvement and withdrawal of close relationships
Pathological personality traits	Negative Affectivity	**Emotional liability**	Unstable emotional experiences and frequent mood changes
		Anxiousness	Intense feelings of nervousness, tenseness, or panic, often in reaction to interpersonal stresses
		Separation insecurity	Fears of rejection by significant others or fear of the end of a desired relationship
		Depressivity	Frequent feelings of being down, miserable, and/or hopeless and difficulty to get rid of these feelings
	Disinhibition	**Impulsivity**	Behaviors on a momentary basis without a plan or consideration of outcomes Difficulty in planning or following up
		Risk taking	Showing dangerous, risky, and potentially self-damaging activities without concern about consequences
	Antagonism	**Hostility**	Anger or irritability in the face of small and insignificant events

Based on APA, 2013.

changes in the Diagnostic and Statistical Manual of Mental Disorders 5th Edition to identify and diagnose BPD (12).

With these historical changes in the diagnosis of Borderline personality disorder, finally in the DSM-5, borderline personality disorder takes place as a psychiatric condition characterized by fear of abandonment (real or imaginary), unstable interpersonal relationships, inconsistent self-perception (identity confusion), impulsivity, repetitive suicidal behaviors, chronic dysphoria, sense of emptiness, difficulties in regulating emotions, and disinhibition. To diagnose borderline personality disorder, 5 out of 9 these criteria must be met (12). An explanation of DSM-5 criteria for borderline personality disorder presented in Table 1.

Epidemiology

The prevalence of the borderline personality disorder has been studied in different communities, especially in the United States. Despite the multitude of studies in this area, it is impossible to determine the prevalence of this disorder with definite numbers because of contradictory results of these studies. These studies reported the prevalence of borderline personality disorder vary between 0.05% (13) and 1.4% (14). Therefore, it can be assumed that the average prevalence of BPD in the general population is about 1%.

When it comes to primary care populations, the prevalence of the disorder increases to 6%, and in outpatient mental health settings, it has been estimated to be approximately 15% to 20% (15). Furthermore, in a recent meta-analysis conducted by Meaney et al. with forty-three college-based studies, the prevalence of BPD in college samples ranged from 0.5% to 32.1%, with a lifetime prevalence of 9.7% (16).

The prevalence of BPD in some important studies (17) is demonstrated in Table 2.

Comorbidity

The recent studies in the literature show that Borderline personality disorder is associated with mood disorders, especially major depressive disorder. Personality disorders

Table 2: The Prevalence of BPD Reported

Author(s)	Year	Place	Description of Sample	n	Prevalence
Drake & Vaillant	1985	USA	Normal control male probands originally recruited in a study of juvenile delinquency.	369	0.8
Zimmerman & Coryell	1989	USA	Relatives of normal controls (23%) and of psychiatric patients with schizophrenia (16%), psychotic (31%) and nonpsychotic depression (29%) or another psychiatric disorder (1%).	797	1.6
Reich et al.	1989	USA	Randomly drawn from a Midwestern university community.	235	1.3
Swartz et al.	1990	USA	Community sample from the USA	1,541	1.8
Black et al.	1993	USA	First-degree relatives of obsessive-compulsive probands (49%) and of normal control probands (51%).	247	3.2
Bodlund et al.	1993	Sweden	Normal control subjects.	133	3.8
Blanchard et al.	1995	USA	Normal unscreened control subjects.	93	1.1
Klein et al.	1995	USA	Relatives of 45 normal controls.	229	1.7
Lenzenweger et al.	1997	USA	Undergraduate students enrolled at Cornell University.	258	1.3
Jackson & Burgess	2000	Australia	Community sample from Australia	10,641	1.0
Torgersen et al.	2001	Norway	Randomly drawn from the National Register of Oslo.	2,053	0.7
Ekselius et al.	2001	Sweden	Randomly selected from the community of Gotland.	557	5.4/4.8
Samuels et al.	2002	USA	Adult household residents who were not examined by a psychiatrist in an earlier stage of the study and screened for several Axis I disorders.	742	0.5
Crawford et al.	2005	USA	Community sample from two upstate New York counties.	644	3.9
Coid et al.	2006	United Kingdom	Community sample from England, Wales or Scotland.	626	0.7
Lenzenweger et al.	2007	USA	Community sample from the USA.	5,692	1.4
Sar et al.	2007	Turkey	Women from 500 households in Sivas.	628	3.5
Grant et al.	2008	USA	Community sample from the USA.	34,653	5.9

Adapted from Distel et al. (2009)

Table 3: Lifetime Comorbidities in BPD	
Personality Disorders	
Avoidant Personality Disorder	43%-47.4
Obsessive-Compulsive Disorder	18.2%25.7%
Dependent Personality Disorder	16%-50.7%
Paranoid Personality Disorder	13.7%-30.3%
Other Psychiatric Disorders	
Mood disorders	96%
Depression	71%-83%
Panic Disorder	34%-48%
Alcohol or substance use disorder	50%-65%
Eating disorder	7%-26%

are also accompanied. In addition, symptomatology of this disorder is very similar to the symptomatology of bipolar disorder, attention deficit and hyperactivity disorder, and posttraumatic stress disorder, and these disorders are considered to be comorbid psychiatric disorders (18-20). Most epidemiological studies have claimed that the prevalence of substance use disorders, namely alcohol dependence and any drug abuse, narcissistic personality disorder and antisocial personality disorder were more common among men with BPD, while rates of PTSD were greater among women (21-23). Furthermore, the results of a more recent study conducted by Grant et al. revealed that MDD, dysthymia, panic disorder with agoraphobia, social and specific phobias, and GAD were more common among women (24).

According to the results of a retrospective case–control study conducted by Shen et al.; depressive disorder, bipolar disorder, anxiety disorder, substance use disorder, sleep disorder and mental retardation were more frequent in patients with BPD compared to the control group. In the same study, it was found that in female patients, depressive disorder, bipolar disorder, anxiety disorder and sleep disorder were more frequently accompanied by borderline personality disorder, while in male patients, substance use disorder and mental retardation were more frequently associated (25).

The rates of lifetime comorbidities (26-27) in patients with BPD are demonstrated in Table 3.

Causative Factors

As with most psychiatric disorders, no single factor can explain its development, and multiple factors (biological, psychological, and social) all play a shared role. For a long time, the main causes of the development of BPD were considered as poor and uninformed parenting. However, most researchers have started to agree that both environmental and biological factors, especially genetic ones, play an important role in the development of BDP (28-30). In general, the common risk factors for the development of borderline personality disorder have been listed as biological factors, parental separation, adoption, exposure to domestic violence, crime story in family members, growth with inappropriate parental behaviors and attitudes, childhood neglect and abuse in previous studies (31). Especially, childhood trauma has a prominent place among the factors that cause borderline personality disorder, and there are various studies in the literature on this subject. Although a meta-analysis by (32) and a review article by Paris (33) previously demonstrated only weak relationships between childhood sexual abuse and BPD, there are many other studies reported that childhood trauma may be not the primary etiological factor in BPD, but it remains to be an important risk factor for the development of BPD (34-36).

Suicidality in Borderline Personality Disorder

Suicidal ideation and attempts are very common among patients with borderline personality disorder as it is one of the nine criteria of BPD. Therefore, in the initial assessment, it is important to know about suicide risk rate in order to establish a safe treatment environment and to determine whether the patient will be treated as outpatient or inpatient. Suicidal tendency is most common in patients with Borderline personality disorder at the age of 20 (37). However, completed suicide attempts are more common after 30 years of age and generally occur in people who have attempted treatment more than once, but not recovered (37). In the study of Paris and Zweig-Frank where 64 patients with borderline personality disorder were followed up for 27 years, the lifetime risk of death by suicide rate among patients with BDP found to be 10.3% (7). However, this rate was considerably lower in McGlashan's Chestnut Lodge study (3). McGlashan reported this rate as 3% with a higher rate of suicidal thoughts (48%) (3). In addition, in another 7-year follow-up study conducted by Links et al., the lifetime risk of death by suicide rate has been found to be 4.6% (38).

The causes of suicidal behaviors have been studied in many studies (39-41). A 16-year prospective follow-up

study that has examined the predictors of suicide attempts in patients with borderline personality disorder reported that prediction of suicide attempts among borderline patients is complex that some of them can be listed as co-occurring disorders, co-occurring symptoms of BPD (self-harm, affective reactivity, and dissociation), adult adversity, and a family history of completed suicide (39). In another follow-up study, it was found that the causes of suicidal behavior in BPD changed in the progress of time. Depression has a short-term effect, whereas poor social cohesion may increase the risk over time (42). Moreover, in a previous study, it has been reported that impulsivity and a history of childhood abuse are significant causes of suicide attempts in BPD patients (41).

Brain Imaging Findings

Abundant evidence suggests that that impulsivity in BPD is associated with alterations in blood şow in frontal cortical regions (43). An important issue with regard to the interpretation of neuroimaging data concerns the view suggesting that alterations in brain metabolism or structure do not necessarily reşect defective functioning. According to Teicher et al., early environmental stress, e.g. in the form of childhood neglect or abuse, is possibly not simply toxic to the brain, thus interfering with (normal) brain development (44). Instead, exposure to signiŞcant stressors during a sensitive developmental period causes the brain to develop along a stress responsive pathway, thereby eliciting a cascade of stress responses that organizes the brain to develop along a speciŞc pathway selected to facilitate reproductive success and survival in a world of deprivation and strife (44). This fundamentally different view of structural and functional brain imaging Şndings is in full accordance with the notions that early experiences not only shape the psychological development of inner working models, but also that early experiences leave a mark on how the hardware (i.e. the brain) supports the operation of one's individual software. In the case of BPD, this suggests that alterations in limbic structure may actually support fast life history strategies.

Treatment Management

BPD presents a therapeutic challenge for clinical psychiatrists. A series of randomized controlled trials of pharmacological treatment and psychotherapy have previously been reported (45-48). However, the trials had a number of limitations, with small samples, attrition rates and durations that were too short (mostly 8–12 weeks) for a chronic disorder that can last for several years. The pharmacological treatment of BPD still remains limited. Altogether, the results can be described as a mild degree of symptom relief. A number of agents, including low-dose atypical antipsychotics (49), specific serotonin reuptake inhibitors (50-52) and mood stabilizers (53, 54), mostly alleviate impulsive aggression, which have been suggested as the core dimensions of psychopathology underlying BPD. Meanwhile, antidepressants are much less effective for mood symptoms in BPD patients compared to patients without a personality disorder (55). Benzodiazepines are not very useful in BPD and carry some danger of disinhibition and dissociation (56). Thus, although several medications achieve symptomatic relief, they do not produce remission of BPD. This is probably the basis for polypharmacy regimens, mostly encountered in clinical practice.

Based on these findings, we can conclude that the mainstay treatment for BPD is psychotherapy. Dialectical Behavior Therapy (DBT), developed by Marsha Linehan, is a form of cognitive behavioral therapy that targets affective instability and impulsivity, using group and individual sessions to train patients how to regulate their emotions (57). This form of behavior therapy has been shown to be effective in bringing suicidal behaviors under control within a year. This manualized therapy combines cognitive behavioral therapy with Eastern philosophy and traditions. It has a strict hierarchy of treatment targets, with life-threatening behaviors at the top of the list. One of the key dialectics in the treatment is the balance that the therapist must achieve in validating the experiences and behaviors of the patient while promoting change (57). The therapy includes weekly individual sessions and weekly life-skills group sessions that teach skills in 4 domains: mindfulness, distress tolerance, regulation of emotions, and interpersonal effectiveness. The therapy is designed to last at least 1 year; subsequent phases have also been suggested (57). There is also evidence from a randomized controlled trial supporting the use of a modified form of psychoanalytic therapy in a day-treatment setting (49). These forms of psychotherapy for BPD are expensive in terms of resources and are not generally available. In practice, therapy tends to be practical and supportive.

CONCLUSIONS

Borderline personality disorder is a psychiatric condition with a high prevalence in the general population and primary care. Although there are many psychological and pharmacological interventions that are proven to be helpful in treating symptoms of BPD and there are studies that confirm the tendency toward symptom remission in the long term, it is still largely unrecognized and under-treated. It is well known that BPD is associated with suicidal ideation, comorbid psychiatric disorders, and functional impairments.

As experts working in the field of mental health recognize the comorbidity, epidemiology, etiology, and different treatment approaches of borderline personality disorder, vital steps are taken in the treatment and management of this disease. Further research into the etiology and treatment of BPD is needed, the results of which may help to develop evidence-based approaches that are practical and specifically tailored for this challenging disorder.

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