

THE LONG SHADOW OF TRAUMA

Borderline personality disorder is one of the most stigmatized psychiatric diagnoses. Is it time to recast it as a trauma-related condition?

> By Diana Kwon Illustrations by Kelly Romanaldi



WO WINTERS AGO, AFTER A SPELL OF BURNOUT LANDED HER IN THE HOSPITAL, ANN BEGAN HAVING disturbing dreams. Visions of her father turned into distressing flashbacks from her childhood—scenes of physical and psychological abuse.

A single mother of three daughters, Ann, whose name has been changed for privacy, grew up a town in eastern Germany, an hour's drive from the country's capital, Berlin. She spent her childhood surrounded by alcoholics, including her father and her grandfather. After school, she would often return to an empty house, and she found no comfort when her parents came home. Both her mother and father were violent, physically and emotionally. As a teenager, she was raped multiple times. She also lost a close friend, who, after becoming pregnant, was murdered by her own father.

Of all those horrible experiences, Ann says that the thing that hurts the most is how little her parents seemed to care about her. When she told her mother she had been raped, her mother responded by saying she was to blame for her own assault. When she was hit by a car while biking to work, her father unsympathetically said, "Get up, everything is fine," and sent her on her way. It was only after a colleague rushed to her in shock, asking why her head was covered in blood, that she realized how bad the accident had been. "That's the hardest thing for me," Ann tells me, as her voice starts to tremble and tears fill her eyes. "To have parents that don't see you as a person."

Based on her recollections, Ann was an angry, aggressive child who struggled to control her emotions and communicate effectively with others. As a teenager, she attempted suicide twice. During adulthood, Ann, now in her 40s, engaged in risky behavior such as driving too fast and has often felt the need to hurt herself, which she fulfilled by picking at her skin. The urge was so compulsive that some mornings she woke up with bloodied arms. Emotion regulation continues to be one of her biggest issues: when problems arise, she quickly becomes overwhelmed. "I need to talk to somebody immediately," she says. "Otherwise I'm afraid I will do something to myself."

I met Ann at the Central Institute for Mental Health (also known as the ZI, an acronym for its German name), which sprawls across several city blocks in the compact, gridlike center of Mannheim, a midsize city in the southwest of Germany. There Ann is receiving treatment for complex post-traumatic stress disorder (PTSD), a cluster of severe and persistent symptoms that follows exposure to prolonged trauma, and borderline personality disorder (BPD), a condition marked by intense, unstable emotions that adversely affects an individual's self-image and relationships and is often accompanied by self-harm and suicidal behavior.

BPD and complex PTSD share a number of features, such as difficulty regulating emotions and an altered sense of self. A key difference, however, is that complex PTSD explicitly frames an individual's condition as a response to trauma, whereas BPD does not. Many people fit the criteria for both disorders. But the degree to which trauma plays a role in BPD has been the subject of intense debate among psychiatrists and psychologists.

Studies show that anywhere between 30 and 80 percent of people with BPD meet the criteria for a trauma-based disorder or report past trauma-related experiences. Most clinicians who have studied or treated people with BPD agree that not everyone diagnosed with this condition has undergone trauma—at least as it is traditionally characterized. But a growing body of evidence suggests that what constitutes "trauma" is not obvious: even when adverse experiences do not fit the textbook definition of trauma, they can leave lasting marks on the brain and heighten the risk of developing mental ailments such as BPD.

These realizations are challenging the definition and treatment of BPD. Some clinicians and patients have called to rebrand BPD as complex PTSD, arguing that the overlap between these two conditions is significant enough to eliminate the former diagnosis. BPD has long been harshly stigmatized—even by mental health professionals, some of whom reject patients as manipulative, difficult, and resistant to treatment. Others say that although not all BPD is complex PTSD, the evidence of early stressors playing a role in its development is enough to warrant reassessment of its label.

"I think that borderline personality disorder does not fit in the concept of a personality disorder," Martin Bohus, a psychiatrist at the ZI, tells me. "It fits much better to stress-related disorders because what we know from our clients is that there is no borderline disorder without severe, interpersonal early stress."

BLURRY BOUNDARIES

WHEN BOHUS WAS a clinical trainee in Germany, one of the first scenes he encountered on a psychiatric unit was a woman sitting on the floor, painting with blood from her self-inflicted injuries. When Bohus inquired about the patient, the senior psychiatrist on the unit simply said, "Oh, that's just a borderline patient. You cannot do anything. Just discharge her."

"But what if she commits suicide?" Bohus asked.

"They never kill themselves," the psychiatrist responded. "They just say they will." Bohus, following his mentor's advice, discharged the patient. Soon after, the woman took her own life.

This decades-old experience was the first of many that led Bohus, now an established psychiatrist in his mid-60s, to realize that something was wrong with the way that clinicians were treating people with BPD. "In those times, [the field] was completely dominated by this extremely conservative, and I would say hostile, paternalistic, patronizing attitude toward clients," Bohus says.

The term "borderline" was coined in the 1930s by German-American psychiatrist Adolph Stern, who used it to describe a condition that lay in the gray boundary between neurosis—mental ailments such as depression and anxiety that are not accompanied by hallucinations or delusions—and psycho-

sis, in which people lose touch with what is real and what is not. These patients, he wrote, are "extremely difficult to handle effectively by any psychotherapeutic method."

For years "borderline" remained a nebulous concept. It did not become an official diagnosis until the 1970s, when John Gunderson, a psychiatrist at McLean Hospi-

tal in Massachusetts, carefully examined and characterized a group of patients he noticed had been misdiagnosed with schizophrenia. Gunderson defined six key features these people shared: intense emotions that were typically hostile or depressive in nature; a history of impulsive behavior; brief psychotic experiences; chaotic relationships; illogical or "loose" thinking as evident in, for example, bizarre responses in unstructured psychological tests; and an ability to uphold an outward appearance of normalcy.

Shortly after, in 1980, "borderline personality disorder" appeared in the third edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM)*, the main handbook used by psychiatrists and psychologists in North America and for research purposes worldwide. The diagnosis helped to spur investigations into the underpinnings of the condition and the development of treatments for patients. Long-term studies by Gunderson and his colleagues also revealed that despite the prevalent belief that borderline was a chronic, incurable condition, most patients do, eventually, recover.

How borderline relates to other personality disorders—which are broadly defined as enduring patterns of thinking and behaving that diverge from societal expectations and cause both individual and interpersonal problems—remains contested. When it initially appeared in the *DSM*, borderline was classified as one of several distinct personality disorders, each defined by specific features. Narcissistic personality disorder, for example, is characterized by grandiosity, self-centeredness and a lack of empathy.

BPD is more commonly diagnosed in women, but some studies suggest that the numbers of men and women with the disorder are roughly equal. The apparent gender difference may arise from women's greater willingness to seek mental health care, as well as from divergent presentations of the ailment that make men more likely to be diagnosed with narcissistic, antisocial or other personality disorders. These and other overlaps induced many clinicians and researchers to point to a dearth of evidence supporting distinct classes of disorders. They argued instead for a so-called dimensional model under which a single, broad personality disorder diagnosis would be characterized by symptom severity and the presence of certain traits in each patient.

Others experts spoke out vehemently against overhauling the existing system. Among them were Gunderson and Bohus, who argued that a large body of research on specific disorders—particularly BPD—had led to uniquely tailored treatments and that adopting a completely new model would upend this progress and harm patients. The 2019 version of the *International Classifica-tion of Diseases (ICD)*, the diagnostic canon published by the World Health Organization, adopted a new dimensional model but retained a separate borderline label to assuage supporters of the diagnosis; the *DSM*, last revised in 2013, kept the categories and included an alternative diagnostic framework with a dimensional approach. (Both the *DSM* and *ICD* are used widely by mental health clinicians and researchers worldwide, but the latter is more commonly utilized to label conditions for insurance purposes.)

Even without meeting the textbook definition of trauma, adversity can mark the developing brain.

Disagreements abound. Some experts, such as Carla Sharp, director of the Developmental Psychopathology Lab at the University of Houston, propose that the traits of BPD capture dysfunctions common among all personality disorders. Others, such as Bohus, hold that BPD is unique-and that the disorder has a specific link to past traumatic experiences. How one's history contributes to other personality disorders is unclear. Most studies to date have featured people with BPD because they are more likely than those with other personality disorders to seek help. Julian Ford, a clinical psychologist at the University of Connecticut School of Medicine, notes that although he views trauma as a potential contributor to all personality disorders, studies into this question are lacking. "There is enough research to indicate that trauma can play a role in virtually any personality disorder," Ford says. "Exactly what the role is-I don't know that we have the research to determine that yet."

EMOTIONAL SKIN

BOHUS REMEMBERS the eye-opening time he spent during his early years as a psychiatrist at the Weill Cornell Hospital in White Plains, N.Y., where he saw two radically different methods of treating people with BPD. In one, patients were confined to a locked unit and heavily medicated. The climate around them was hostile and suspicious, and most remained for a year or longer. In another, the unit was open, and the atmosphere was warm and supportive. Patients were encouraged to help one another develop skills that would enable them to tolerate their distress, and most left with noticeable improvement a few months after admission. The latter unit structured treatment around a method developed by American clinical psychologist Marsha Linehan, who was herself diagnosed with BPD. Shortly before graduating from high school, Linehan was admitted to a locked ward in the Institute of Living, a psychiatric hospital in Hartford, Conn. There Linehan slashed her limbs with sharp objects, burned herself with cigarettes and smashed her head into the hospital floors. Her doctors attempted a range of treatments, including drugs, electroconvulsive shocks, seclusion and cold therapy (where she was wrapped in freezing blankets and strapped onto a bed)—most of which, according to Linehan, probably hurt more than helped.

This experience, which in her memoir Linehan recounts as a "descent into hell," motivated her to dedicate her life to helping others like herself. Through this journey Linehan came to highlight emotion dysregulation as a driving force of the disorder, noting that people with BPD routinely experience a roller coaster of emotions. "Borderline individuals are the psychological equivalent of third-degree-burn patients," Linehan told *Time* magazine in 2009. "They simply have, so to speak, no emotional skin. Even the slightest touch or movement can create immense suffering." For someone with BPD, seemingly minor provocations can arouse feelings of extreme anger, shame or despair.

Using these insights, Linehan developed a new treatment, which she called dialectical-behavioral therapy, or DBT. It focuses on both accepting oneself and modifying harmful behaviors: the name "dialectical" describes the balance between acceptance and change. Clinical trials have shown that DBT successfully reduces some of the key features of borderline, such as self-injury and suicidal behavior and hospitalizations, as well as other symptoms.

Seeing DBT in action, Bohus realized this method was far superior to the other means of treating BPD that were available at the time. After returning to Germany, he established the country's first unit specialized in treating BPD with DBT. Since then, DBT clinics have become widespread in Europe and the U.S. and have been established in Latin America, Asia and the Middle East. Despite the benefits of DBT, however, over the years Bohus noticed its limitation when it came to dealing with an issue many of his patients experienced: trauma.

"CAPITAL T" TRAUMA

PTSD APPEARED as an official diagnosis in the *DSM* in 1980, the first mental illness defined by an external cause. It described a condition in which problems such as flashbacks, nightmares and anxiety occur in the wake of a terrifying event. Similar ailments, such as the "shell shock" described during World War I, had been reported for decades. But it was widespread awareness of the psychological needs of Vietnam War veterans that prompted this inclusion.

In the early 1990s, after scanning years of literature on trauma survivors, Judith Herman, a psychiatrist at Harvard University, proposed "complex PTSD" as a new diagnosis (distinct from PTSD) to account for a cluster of symptoms that resulted from long-term exposure to extreme stress. These problems, Herman noted, occurred when one person was under the control of another, such as in the context of prisons or labor camps or in certain families. They included difficulties with emotion regulation, unstable personal relationships, pathological changes in identity and self-image, and self-destructive behavior.

"The current diagnostic formulation of PTSD derives primarily from observations of survivors of relatively circumscribed traumatic events," Herman wrote in a 1992 paper. "This formulation fails to capture the protean sequelae of prolonged, repeated trauma." She also noted that the symptoms of people with complex PTSD were "too easily attributed to underlying character problems" and risked being misdiagnosed as a personality disorder.

Decades of debate ensued. One of the biggest sticking points is the significant overlap between this diagnosis and BPD. Lois Choi-Kain, a psychiatrist and director of McLean Hospital's Gunderson Personality Disorders Institute, remembers the intense arguments that raged during the early 2000s. "There was a huge divide and an almost rabid controversy about the distinction of BPD and PTSD or trauma-related disorders, as though they were mutually exclusive and as if only one could stand," Choi-Kain says. People generally fell into two camps, she explains: those who thought PTSD was being unfairly pathologized as a problem of personality and others who said that whereas many with BPD had trauma in their past, it did not explain the entire disorder.

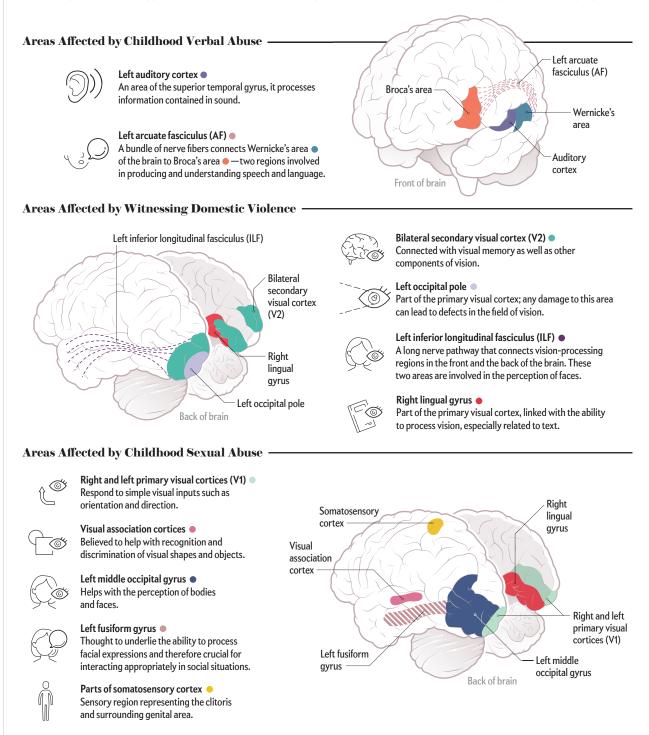
A core question at the center of this debate has been: What qualifies as trauma? Although some people with BPD, such as Ann, have experienced severe traumatic experiences in their past and clearly fit the complex PTSD diagnosis, many with the condition do not. One is Rebbie Ratner, a 49-year-old woman who was diagnosed with BPD a decade ago and runs a YouTube channel, Borderline-Notes, to raise awareness about the condition. Ratner explains that she investigated the complex PTSD diagnosis during her lifelong journey of trying to figure out an explanation for the extreme emotional pain and a slew of problems she had struggled with, including many damaged relationships and a serious eating disorder. "It never fully sat with me," Ratner says. "There are some real difficult psychological things that happened in my family," she adds, but none were severe enough to meet the criteria for a trauma-related disorder. "I think I have parents who do love me."

In the fifth (and most recent) edition of the *DSM*, "trauma" includes events in which a person directly experiences or witnesses "exposure to actual or threatened death, serious injury, or sexual violence," learns that such events happened to a close family member or friend, or has repeated exposure to these events (for example, while working as a first responder or a police officer). But for many in the mental health community, what counts as trauma is not so clear-cut. The official definition can be thought of as describing "capital T" trauma, as opposed to the "little t" trauma of distressing experiences such as verbal abuse, neglect, bullying and poverty that are not considered severe enough to hit this diagnostic bar. "The definition of trauma is always extremely tricky," says Andreas Maercker, a clinical psychologist at the University of Zurich and one of the proponents of complex PTSD.

A large U.S. survey of potentially traumatic experiences, ranging from violence and neglect to growing up in an unstable home, revealed that almost two thirds of adults experienced at least one such event in early life. Neuroimaging studies of people who have dealt with such adversities find that some little t traumas can leave lasting marks on the brain, especially when such stresses are experienced during childhood or adolescence, when the brain is still developing. Some of these alterations are very specific. For example, people with a history of verbal abuse from their parents appear to have changes in the auditory cortex that correlate with verbal difficulties later in life. Broader impacts include reduction in the size of the hippocampus (a structure involved in memory and learning), heightened activity in the amygdala (a key center

The Traumatized Brain

Childhood adversity leaves enduring marks on the brain. Some alterations, such as in the structure and function of the amygdala, hippocampus and other regions involved in processing memory and emotion, are common to all types of maltreatment. Other changes are more specific. Children subjected to chronic verbal abuse, for example, may have weakened connections between regions involved in understanding and producing speech. These changes most likely helped them survive incapacitating distress but later in life can lead to psychological problems. Many who have these abuse-induced brain markers do not experience psychiatric disorders, however. Growing up in otherwise supportive environments and thus escaping "traumatic invalidation" might have protected those people.





for emotion regulation), and distorted connections between these and other regions of the brain.

"The effects of emotional maltreatment and emotional neglect are really quite profound," says Martin H. Teicher, director of the Developmental Biopsychiatry Research Program at McLean Hospital. "They're completely on par in terms of brain effects with physical abuse or sexual abuse."

Assessments of people diagnosed with BPD have revealed a variety of environmental stressors that heighten the risk of developing the condition. These include big T trauma such as childhood sexual abuse and little t traumas, such as harsh parenting, neglect and bullying. Bohus, along with another psychiatrist at the ZI, Christian Schmahl, and their colleagues have found that patients with BPD and those with a history of trauma also share some common neurobiological alterations. These changes include structural and functional abnormalities in the limbic system, which is associated with emotion and includes the amygdala and hippocampus.

This overlap, Schmahl says, may indicate a signature of trauma or stress that underlies BPD. Clearly delineating a neural signature of BPD remains a challenge, but the findings so far have already inspired potential new treatments. Schmahl and his colleagues at the ZI are currently testing whether neurofeedback training of the amygdala—in which people are taught to control their brain activity in real time—can augment existing therapies.

"Traumatic events, whether it's childhood bullying or neglect from parents or caregivers, have long-term consequences for people—they impact your ability to trust others, regulate your emotional states, and how you learn to cope," says Shelley McMain, a clinical psychologist at the Center for Addiction and Mental Health in Toronto. "They have wide-ranging consequences in various life domains—and as a result, I think it becomes very important to consider the implications of childhood adverse experiences when you're treating people who are diagnosed with borderline personality disorder."

Some experts, such as Choi-Kain, hold that although stress and past trauma play a big role in the development of BPD, the disorder also has other components. For one, studies comparing identical and fraternal twins (who share nearly 100 percent and roughly 50 percent of their genes, respectively) and of families indicate that the disorder is strongly heritable, suggesting there may be a genetic component. Such biological dispositions may mean a child is born with a sensitive temperament that makes it more likely for them to experience difficult situations as upsetting, according to Sharp.

On top of that, Choi-Kain notes that the relation between trauma and BPD does not go in only one direction. The symptoms of borderline, such as emotional dysregulation and interpersonal sensitivity, can make an individual with the disorder more fragile in stressful situations and interfere with their ability to cope effectively and communicate comprehensively, she explains. "A person who is emotionally and interpersonally sensitive becomes impulsive and angry at others when they feel hurt or threatened and are at risk to be misun-

derstood and experience rejecting, retaliatory or controlling responses from others," she adds. "These vulnerabilities can explain why those with the disorder encounter social adversity repeatedly." For example, one 2014 study of more than 2,000 teen girls and their parents found that the severity of BPD symptoms predicted how harsh parenting behavior became in the following year.

For these reasons, Choi-Kain thinks that replacing BPD with complex PTSD could harm more than help. "A person may develop BPD because they were dealt a very difficult set of cards that are both biological and environmental," she tells me. "And to kind of cleave off the people with trauma—it's like saying the only legitimacy to this disorder is if you've been heavily traumatized."

TRAUMATIC INVALIDATION

oNE OF THE BIGGEST lingering mysteries is why adverse experiences in childhood lead to BPD or other disorders—such as complex PTSD, depression or substance use—in some people but not others. Looking for answers, Teicher's team conducted neuroimaging studies on people who remain without any psychiatric diagnosis despite maltreatment during early life. To their surprise, their brains looked very similar to those of people with a vast array of diagnoses—but with specific differences in certain regions, such as the amygdala. Teicher says these distinctions may help explain why some people are able to resist the psychological aftereffects of early problems.

What factors lead to resilience or vulnerability remains an

open question. Those who go on to develop BPD may have grown up in what Linehan calls a "traumatic invalidating environment," where a person feels devalued by those around them. Examples include a dearth of sympathy and care from parents in times of need, constant disapproval from family members, or bullying from peers. An accumulation of such encounters can lead to a variety of negative consequences, such as feeling alienated and being extra sensitive to rejection, Bohus says. "Most of our patients have really struggled to adapt to positive signals, all driven by this experience of repetitive traumatic invalidation," he says.

By studying dozens of women who were exposed to severe sexual assault in early life, Bohus and his colleagues found evidence that those who escaped the additional torment of invalidation are able to develop fulfilling partnerships and live without psychiatric problems. Crucially, Bohus says, they always had somebody they could talk to about their experience. "Of course, it's unpleasant; it's a disaster," he says. "But it's not so disastrous if you can share it."

Ann sees the constant invalidation she received from her parents as the root of her problems. "I can't really love myself, because my parents told me that I'm not lovable," she says. "I have to go against it every day. Every single day I wake up and say, I want to walk on a new path." Chronic invalidation on its own can also be considered a type of little t trauma—and may, without the presence of other painful or distressing events, lead to the development of BPD. Jana (name changed for privacy), a patient with BPD receiving treatment at the ZI, tells me that the lack of emotional validation she received as a child is what probably led to her condition. "I'm not quite sure my mother loved me or if she just felt obliged to love me—with my father, I know he loved me, but he wasn't able to show it," she tells me. "If your feelings are not validated by your parents ... then you don't really learn how relationships work or how to use your emotions."

BREAKING THE CYCLE

THE RESIDENTIAL CLINIC for patients with BPD and complex PTSD in Mannheim is housed in one of the newest buildings at the ZI. The front facade is mostly glass, and the interior is clean and bright. Stephanie Mall, a young psychologist who works on the ward, gives me a tour of the floor where their adult patients reside. The doors, on which each patient has hung their name, are all closed, and the atmosphere is unexpectedly still. "Is it usually that quiet?" I later ask. "No, it's not always that quiet," Mall responds with a laugh. It was the afternoon, when most patients either go out or take a nap. Mornings are often filled with individual and group therapy sessions, so many of them are exhausted by midday, she explains.

As we sit eating lunch in a park a block away from the ZI, Mall describes a patient who came to the clinic after a suicide attempt that had landed her in the intensive care unit of a hospital. She had been diagnosed with BPD, and she was very ill—barely talking, extremely depressed and constantly cutting wounds into her arm so deeply they required stitches. "We discovered together that she had PTSD," Mall tells me. The woman had experienced intense violence, both sexual and nonsexual. It was only after receiving both DBT and trauma-specific therapy that the patient showed signs of positive recovery. "She doesn't hurt herself anymore," Mall says. "She is not suicidal at all. She wants to live." Before they met, "everybody just said she's manipulative, she's combative, just opposing all the time—and nobody asked why."

A handful of clinical research groups around the world are now working on integrating a focus on trauma into interventions for BPD. At the ZI, Bohus's team has established a new treatment that combines dialectical-behavioral therapy with trauma-focused therapy (which involves exposing the patient to stimuli that trigger trauma-related memories in a safe environment), which they have dubbed DBT-PTSD. One of the core aims of this treatment is to help people connect their past traumatic experiences to their present condition—and in doing so, to identify the related cues that trigger adverse thoughts and behaviors. "You need to repeatedly reactivate these cues and teach the brain that these cues are no longer relevant," Bohus explains. On its own, DBT is good at teaching people the skills to describe and regulate their emotional systems to control their behaviors. It rarely revises those cues, however.

Bohus and his colleagues recently carried out a multicenter, randomized controlled trial across three outpatient clinics in Germany to examine the efficacy of this treatment in women with childhood abuse-associated PTSD and who fit several of the criteria for BPD. Their study, which was published in July 2020 in *JAMA Psychiatry*, showed that this treatment significantly improved symptoms of PTSD and BPD—and to a greater degree than a well-established trauma-focused treatment known as cognitiveprocessing therapy.

The team is now modifying this treatment for people with BPD—but no big T trauma in their past—to deal specifically with the traumatic invalidation. The researchers are calling this new method "structured exposure DBT," or SE-DBT. A pilot trial, which will take place at two clinics in Germany and one in Canada, will begin in January. "I really see the focus on trauma processing in psychotherapy for BPD as really revolutionary and probably overdue," says McMain, who will be leading the Canadian trial at the Center for Addiction and Mental Health. "The hope is that this will accelerate recovery and accelerate change."

After spending several months at the ZI's residential clinic for BPD and complex PTSD, Ann is now continuing her therapy as an outpatient. She is still processing her past traumas, but her ability to control her emotions has significantly improved.

Even with these newly available therapies, many people with the combined BPD and complex PTSD diagnosis still struggle to find psychotherapists who will provide such treatments—which can often take months, if not years—at an affordable cost. For Peggy Wang, an American woman who has been diagnosed with both BPD and complex PTSD, the biggest question is not which of these is a better diagnosis for her; it is how she can access the treatment that will enable her to improve. Wang struggles with a multitude of problems—including substance use, job instability and problems forging healthy relationships—which she attributes to the emotional and physical abuse she endured at the hands of her parents. Wang tells me that she spent 10 years going from therapist to therapist in New York and California. When she finally found the right one, she could not pay for more than a few sessions.

"The labeling is not the issue," Wang says. "It's finding the solution for all of this." \square

FROM OUR ARCHIVES

A Disorder of Mind and Brain. Diana Kwon; November 2020.

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