Trauma Spectrum Disorders:
Borderline Personality Disorder
Project ECHO
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Main Points

- Personality disorders are seen relatively frequently in primary care and complicate the relationship between patients and health care professionals, increase the risk of premature mortality, and result in a huge cost to society.
- Both the DSM 5 and ICD 11 Borderline Personality Disorder (BPD) diagnosis are characterized by intense emotional experiences and instability in relationships and behavior that begins in early adulthood.
- BPD is strongly associated with childhood trauma; trauma can cause long acting effects that we have previously described as personality pathology.
- Trauma Spectrum Disorders include BPD, posttraumatic stress disorder, a subgroup of major depressive disorders and Dissociative Identity Disorder, each with similar stress induced neurobiology.
- Gene and environment interaction is likely to cause BPD.

Main Points (2)

- Gene variants or epigenetic changes that affect Hypothalamus-Pituitary-Adrenal axis may increase the risk of BPD.
- BPD screening is simple and time efficient.
- Clinical management: team up with significant others and other staff, emphasize safety in all interactions, remember that most people with BPD will eventually get better and treat co-occurring disorders.
- There is one evidence based therapy relatively available in US, but other psychotherapies and mindfulness can also be useful.
- Referral to mental health treatment for patients with trauma histories needs care, understanding, time and planning.
- Trauma Focused Cognitive Behavioral Therapy and substance use disorder treatment among youth may be preventative.

Personality Disorder

- Personality Disorder (PD) is important to all health care practitioners because it is a prevalent condition that applies to approximately **12% of the general community** (Torgersen, 2013).
- **PD can be recognized in 25% of primary care patients** (Moran, Jenkins, Tylee et al., 2000),
- PD can be recognized in at least 50% of psychiatric outpatients (Beckwith, Moran, Reilly, 2014).
- **PD complicates the relationship between patients and health care professionals, increases the risk of premature mortality, and results in a huge cost to society** (Tyrer, Reed, Crawford, 2015).
- ICD-11 and DSM 5 define personality disorders differently, detailed information in Appendix.

Borderline Personality Disorder Defined by DSM 5 and ICD 11

- The DSM 5 recognizes Borderline Personality Disorder (BPD) as a disorder characterized by **intense emotional experiences** and **instability in relationships** with behavior that begins **in early adulthood** and manifests itself in **multiple contexts (home and work).**
- DSM-5 diagnostic criteria include: **A pervasive pattern of instability in interpersonal relationships, self image, and emotions, frantic efforts to avoid real or imaged abandonment, impulsivity that is self-damaging, recurrent suicidal behavior, chronic feelings of emptiness, inappropriate, intense anger, and transient stress related to alternations in reality**.
- The ICD-11 classification allows clinicians to specify a borderline pattern qualifier, which essentially consists of the nine DSM 5 diagnostic features (Mulder, 2021).

BPD, although currently defined as a personality disorder has a history of being classified as a mood disorder See Appendix for further history.

BPD Basic Epidemiology

- Prevalence of BPD in the general population varies, ranging from **1% to 2%.**
- BPD is several times **more common in (especially young) women** than in men, by as much as 3:1.
- BPD is prevalent (20%) among **psychiatry in-patients and prison populations:** 23% of incarcerated men and 20% of incarcerated women (Skodol & Bender, 2003).
- **BPD is associated with significant disability and high costs to society** including **criminal justice costs, lack of employment and impaired productivity and disability costs** (Brettschneider, Riedel-Heller, Konig, 2014).
- BPD patients demonstrate **high patterns of service utilization of both inpatient and community treatment.**

Meuldijk, McCarthy, Bourke, Grenyer, 2017

BPD Is Strongly Associated With Trauma: Childhood, Adolescent and Adult

- Maladaptive parenting (including childhood maltreatment, abuse and neglect) has been implicated in the etiology of PD, particularly BPD.
- Overall, five systematic reviews overwhelming found that maladaptive parenting was a psychosocial risk factor for the development of BPD (Steele, Townsend, Grenye, 2019).
- In comparison with those who suffer from other personality disorders, **patients with BPD experience childhood abuse more frequently** (Bozzatello, Rocca, Baldassarri et al., 2021).
- Studies indicated that children with borderline features were more likely to have a history of maltreatment, and that children who had been maltreated were more likely to present with borderline features. **Maltreatment is a risk factor for borderline features in childhood.**

Ibrahim, Cosgrave & Woolgar, 2018

BPD Is Strongly Associated With Trauma: Childhood, Adolescent and Adult (2)

- Temperamental and mental state abnormalities resemble aspects of the BPD emerge in childhood and adolescence and presage the BPD syndrome in adolescence or adulthood (Chanen & Kaess, 2012).
- This meta-analysis summarized evidence from 61 studies.
- **Results demonstrate that adult and youth BPD share common etiological and psychopathological correlates.**
- **This offers support for the diagnostic validity of youth BPD and indicates the need for clinical recognition in this age group** (Winsper, Lereya, Marwaha et al., 2016).
- Children and adolescents who exhibit aspects of BPD behavior are highly likely to be the **victims of bullying,**

Winsper, Hall, Strauss and Wolke, 2017

BPD Is Strongly Associated With Trauma: Childhood, Adolescent and Adult (3)

- The present study explored the association between Traumatic Life Events (TLE) and eight psychological constructs before and after adjusting for concurrent symptomatology in a diverse sample of 2342 undergraduates.
- **Results indicated that exposure to at least one TLE, but especially four or more TLEs, was significantly associated with PTSD and BPD symptoms even after controlling for concurrent symptoms.**
- Findings underscore the critical role that late adolescent traumatic life events play in posttraumatic stress and BPD.
- Studies of adult trauma and BPD are summarized in the Appendix.

Gibson, Cooper, Reeves, Anglin, and Ellman, 2017

Trauma Spectrum Disorders

- Include **PTSD, a subgroup of major depression, BPD, and DID** (Bremner, 2002).
- This group is **related to psychological trauma, usually in childhood, share an underlying neurobiological footprint** (Bremner, 1999, 2002, 2016) with **high symptom overlap**, and are **often co-morbid**.
- **Brain circuits and systems involved in the stress response and fear memory are affected** (Bremner, Krystal, Southwick et al., 1995).
- The hippocampus is sensitive to stress. **Hippocampal volume has been a particularly useful marker of the trauma spectrum disorders** (Bremner & Vermetten, 2012).
- **Brain imaging studies** in patients with PTSD and other stress-related psychiatric disorders **corroborated the initial hypotheses** (Bremner, 2003), and **another decade of research replicated those initial studies**

Trauma Spectrum Disorders: Neurobiological Footprint

- A **cascade of neurologic morphological and epigenetic changes occurs in response to these childhood stressors**, which may have a strong link to the development of BPD.
- We prove the role of alterations in **Hypothalamic-Pituitary-Adrenal (HPA) axis, in neurotransmission, in the endogenous opioid system and in neuroplasticity in the childhood trauma-associated vulnerability to develop BPD**;
- We also **confirm the presence of morphological changes in several BPD brain areas and in particular in those involved in stress response (**Cattane, Rossi, Lanfredi et al., 2017).
- Consistent with adult reports is that **some adolescents with BPD demonstrated structural (grey and white matter) alterations in frontolimbic regions and neuropsychological abnormalities such as reduced executive function and disturbances in social cognition** (Winsper, Marwaha, Lereya 2018).

Genetics of Trauma Response

- **Only a minority of individuals who experience a traumatic event subsequently develop psychopathology**.
- Why some individuals develop a psychiatric disorder after trauma and others do not remains obscure.
- **It is also not well understood why some develop PTSD, although others develop depression or another disorder**.
- In most cases, the manifestation of one or more trauma spectrum disorders in response to trauma is influenced by a complex interplay of preexisting vulnerabilities, including **genetic predispositions**, personality styles, and experiences, as well as psychological and situational factors at the time of the trauma and in the trauma's aftermath.

Heim, Bremner, Nemeroff, 2016

Genetics of Trauma Response (2)

- **Exposure to trauma is strongly linked to the onset and exacerbation of an array of psychological sequelae.**
- **Studies yield minimal evidence of specificity** for one disorder emerging in the aftermath of trauma (Gibson, Cooper, Reeves et al., 2017).
- It is crucial to identify vulnerability and resilience factors, including genetic factors.
- Studies on the genetics of trauma spectrum disorders have been hampered by many factors, such as **genetic heterogeneity** (a similar phenotype develops from different genotypes) and **incomplete penetrance** of the phenotype (a person with genetic risk for PTSD, who is not exposed to trauma, will not develop PTSD).
- Despite these difficulties, **evidence is accumulating that exposure to trauma and pathological responses to trauma are influenced by genetics.**

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Heim, Bremner, Nemeroff, 2016

Heritability of BPD

- A total-population study of 1,851,755 born 1973-1993 in Sweden found **heritability of BPD was 46%** (Skoglund, Tiger, Rück et al., 2021).
- **Heritability estimates range from zero to one**. **A heritability close to zero indicates that almost all of the variability in a trait among people is due to environmental factors**, with very little influence from genetic differences.
- Characteristics such as **religion, language and political preference have a heritability of zero because they are not under genetic control**.
- **A heritability close to one indicates that almost all of the variability in a trait comes from genetic differences**, with very little contribution from environmental factors. Several slides review the concept of heritability in the Appendix.
- Most complex traits in people, such as intelligence and multifactorial diseases have a heritability somewhere in the middle, suggesting that their **variability is due to a combination of genetic and environmental factors.**

https://medlineplus.gov/genetics/understanding/inheritance/heritability

BPD: A Gene and Environment Interaction Disorder (GxE)

- A growing body of evidence is emerging about interaction between genes (**FKBP5 and CRHR2 variants**) and environment (physical and sexual abuse, emotional neglect) (Bozzatello, Rocca, Baldassarri et al., 2021)
- **FKBP5 is a key regulator of the glucocorticoid system underpinning stress responsivity**, and risk alleles can increase vulnerability for developing PTSD (Bryant, Felmingham, Liddell et al., 2016).
- **CRHR2 is one of two receptors for corticotropin-releasing hormone (CRH).** CRH is a peptide hormone that activates the synthesis and release of adrenocorticotropic hormone (ACTH) from the pituitary gland. CRH affects our response to stress (Kishimoto, Radulovic, Radulovic et al., 2000).
- Repeated findings **that genes involved in Hypothalamic-Pituitary-Adrenal (HPA) axis regulation may be altered by exposure to childhood maltreatment,** influencing susceptibility to BPD.
- **This is both biologically plausible and of potential clinical significance.**

Wilson, Robb, Gajwani et al., 2021

BPD is Also an Epigenetic Disorder

- Furthermore, our results indicate an additive effect of childhood maltreatment and **glucocorticoid receptor gene** methylation in predicting BPD,
- Suggesting that the combination of both **childhood maltreatment and DNA methylation possibly represents unfavorable events experienced even earlier in life and increases the risk for BPD** (Radtke, Schauer, Gunte et al., 2020).
- Glucocorticoid hormones (GCs) are essential for life in vertebrates.
- They act through the glucocorticoid receptor (GR), which is expressed in virtually all cells of the human body.
- The actions of GCs are specific to particular cell types.
- Broadly, GCs regulate **carbohydrate metabolism, inflammation, stress** and cell fate.

Caratti, Matthews, Poolman et al., 2015

BPD: An Epigenetic Disorder (2)

- Gene set enrichment analyses revealed that epigenetic alterations were **more frequently found in genes controlling estrogen regulation, neurogenesis and cell differentiation**.
- These results suggest that **epigenetic alterations in the X chromosome and estrogen-regulation genes may contribute to the development of BPD and explain the differences in presentation between genders.**
- **Childhood trauma may modulate the magnitude of the epigenetic alterations contributing to BPD.**

Arranz, Fabrega, Blanco et al., 2021

BPD: Trauma Neurobiology Summary

- **BPD is associated with multiple types of trauma throughout development** from early childhood through late adolescence, such as, Adverse Childhood Experience complex trauma events and other complex traumas, such as, bullying.
- In addition, **DSM 5 type single event traumas during late adolescence are also associated with BPD**.
- **Adverse childhood experiences affect different biological systems (HPA axis, neurotransmission mechanisms, endogenous opioid systems, gray matter volume, white matter connectivity), with changes persisting into adulthood.**
- Specific gene variations, especially in stress response systems and epigenetic effects in stress response systems and estrogen response systems augment or diminish the biological responses to trauma resulting in BPD versus PTSD or Major Depression.

Screening For BPD

- **BPD is underdiagnosed in clinical practice.**
- One approach towards improving diagnostic detection is the use of screening questionnaires.
- The most commonly studied self-report scale specific for BPD is the McLean Screening Instrument for Borderline Personality Disorder (MSI-BPD)
  (Zanarini, Vujanovic, Parachini et al., 2003).

  Zimmerman & Balling 2021
- Copy of the MSI-BPD is in the appendix.

Clinical Management

- **BPD improves over time.**
- **Team Up!** Medicaid patients with BPD are now eligible for Community Care Services (CCS).
- Trauma Informed Care model can be helpful for any patient with a trauma history but can be especially useful for BPD patients and staff interacting with BPD patients.
- Develop empathy, focus on **what happened to you**?
- **Therapy works**, but it may be difficult to make and complete a referral.
- If BPD specific treatment is unavailable, **treat the co-occurring disorders**.
- **Consider prevention.**

BPD Often Improves Over the Long Run

- Decades of longitudinal research challenge that BPD is a chronically disabling condition.
- Prospective, long-term follow-up studies found that most patients with BPD experience a remission**, and many experience a full recovery over the course of their lives.**
- These studies also indicate that symptoms of BPD wax and wane over time, although more acute, behavioral symptoms of the disorder tend to remit rapidly and recur rarely.

Temes & Zanarini, 2018

- A meta-analysis of longitudinal studies with a follow-up period of five or more years were included to avoid treatment effects.
- 19 studies, representing 11 unique cohorts with 1,122 participants.
- **Symptomatic remission is possible and the likelihood of recurrence following a period of remission is low.**
- Conclusion: **Symptomatic remission from BPD is common.**

Ng, Bourke, Grenyer, 2016

Support the Family and Significant Others

- **Positive relationships for adult BPD patients can moderate the BPD course** (Links & Heslegrave, 2000).
- **However, people who care for patients with BPD experience significant distress and burden.**
- The findings indicated that people who care for patients with BPD experience **elevated objective and subjective burden, grief, impaired empowerment, and mental health problems, including depression and anxiety.**
- **Scores on objective and subjective burden were half a standard deviation above the mean compared to people who care for inpatients with other serious mental illnesses.**

Bailey & Grenyer, 2013

Support the Family and Significant Others (2)

- Ten studies were included that were directly related to six interventions for families and people who care for patients with personality disorder.
- The findings of these studies provide initial evidence that **interventions for people who care for patients with BPD may lead to significant outcomes for the participants, particularly in improving well-being and reducing burden** (Sutherland, Baker & Prince, 2020).
- **Supporting the people who care for BPD patients may affect recovery and moderate the course of the disorder.**

Support the Family and Significant Others (3)

- Seeing a patient with BPD with a family member, significant other or friend can be helpful to the patient, the family member and you.
- The family member can benefit from the support and can reinforce interventions outside of the office.
- It also reinforces to you and the family member that you are not alone in dealing with the patient.
- It is also helpful to have another perspective when you are working with a patient with BPD.

BPD Responds to Treatment

- To assess the beneficial and harmful effects of psychological therapies for BPD.
- Conclusions: **Our assessments showed beneficial effects on all primary outcomes in favor of BPD-tailored psychotherapy compared with Treatment As Usual (TAU).**
- **Compared to TAU, we observed effects in favor of Dialectical Behavior Therapy (DBT) for BPD severity, self-harm and psychosocial functioning.**

Storebø, Stoffers-Winterling, Völlm, 2020;

Oud, Arntz, Hermens, Verhoef and Kendall, 2018

Dialectical Behavior Therapy (DBT)

- DBT is a type of **cognitive-behavioral therapy (CBT)**. DBT was developed in the late 1980s by Dr. Marsha Linehan and colleagues when they discovered that **CBT alone did not work as well as expected in patients with BPD**.
- Dr. Linehan and her team added techniques and developed a treatment to meet the unique needs of these patients including **core mindfulness exercises**.
- **Main goals are to teach people how to live in the moment, develop healthy ways to cope with stress, regulate their emotions, and improve their relationships with others** (May, Richardi & Barth, 2016).
- DBT has also been used for eating disorders, substance use disorders and PTSD.

https://www.verywellmind.com/dialectical-behavior-therapy-1067402

- DBT is available on Oahu, but often requires significant time on waiting lists.

BPD Also Responds to Non Specific Psychological Treatments

- Purpose: to critically evaluate the literature on psychotherapies for BPD published over the past 5 years.
- Conclusion: **Our review indicated that patients with various severities benefited from psychotherapy**;
- **More intensive therapies were not significantly superior to less intensive therapies** (Links, Shah, Eynan, 2017).
- The good news is that **psychotherapy over time will help, it doesn't have to be DBT.**
- Consider residential substance use disorder treatment or eating disorder treatment if BPD is comorbid with those disorders.

Pharmacological Treatments for BPD

- **There are no evidence based pharmacological treatments for BPD** (Paris, 2011; Johnson, Griffiths, Picchioni, 2017; Yee, Hawken, Baldessarini, Vazquez, 2019).
- However, a recent meta-analysis challenges that position.
- Aim to estimate **effectiveness of omega-3 fatty acids in BPD using meta-analysis**, with differentiation of affective, impulsive, and cognitive-perceptual symptom domains.
- Included randomized controlled trials (RCTs) that compared omega-3 fatty acids to placebo or any active comparator and pooled data using meta-analysis.
- Five studies were included, describing 4 RCTs testing effects of omega-3 fatty acids in 137 patients with BPD or BPD-related behavior.

Karaszewska, Ingenhoven, Mocking, 2021

Omega-3 Fatty Acids in BPD

- Results: Random effects **meta-analysis showed an overall significant decreasing effect of omega-3 fatty acids on overall BPD symptom severity**.
- **Significant effects on affect dysregulation and impulsive behavior**.
- However, effects on cognitive-perceptual symptoms did not reach the significance threshold.
- Conclusions: **Available data indicate that marine omega-3 fatty acids improve symptoms of BPD, particularly impulsive behavioral dyscontrol and affective dysregulation.**
- **Marine omega-3 fatty acids could be considered as add-on therapy.**

Karaszewska, Ingenhoven, Mocking, 2021

Other Modalities

- There are no evidence based mobile phone apps for BPD (Ilagan, Iliakis, Wilks, Vahia and Choi-Kain, 2020) but apps are available.
- DBT self help materials are available, both online and in hard copy form.

https://www.dbtselfhelp.com/

- Mindfulness apps are available. https://www.mindful.org/free-mindfulness-apps-worthy-of-your-attention/?mc_cid=791618740a&mc_eid=0014c7f841
- Mindfulness Based Stress Reduction courses are available on Oahu and online.
- CBT self help is available. https://www.nami.org/Blogs/NAMI-Blog/November-2016/Discovering-New-Options-Self-Help-Cognitive-Behav and https://www.getselfhelp.co.uk/media/ekplzpw2/selfhelpcourse.pdf

BPD Usually Occurs with Other Mental Health Disorders

- BPD as a sequela of childhood traumas often occurs with **multiple co-occurring disorders** (e.g. mood, anxiety, obsessive-compulsive, eating, dissociative, addictive, psychotic, and somatoform disorders) and includes a **prolonged course, more severe symptoms and treatment resistance** (Bozzatello, Rocca, Baldassarri et al., 2021).
- If BPD specific treatments are unavailable, refer to eating disorder or substance use residential treatment, if those disorders are co-occurring.
- If BPD is severe and the patient has Medicaid, consider referral Community Care Services (CCS).

Mental Health Referrals: Stigma

- **When referrals to specialists are made, individuals frequently don't show up**.
- Background: **Individuals often avoid or delay seeking professional help for mental health problems.**
- **Stigma may be a key deterrent to help-seeking but this has not been reviewed systematically.**
- The review identified 144 studies with 90,189 participants meeting inclusion criteria.
- **Ethnic minorities, youth, men and those in military and health professions were disproportionately deterred by stigma.**
- Conclusions: **Stigma has a small- to moderate-sized negative effect on help-seeking**

  (Clement, Schauman, Graham et al., 2014).
- **The stronger negitive effects of stigma on adolescents and young adults is supported by another met analysis** (Gulliver, Griffiths, Christensen, 2010).

Referral Issues Specifically For Trauma and BPD

- **Safety and Abandonment Fears:** Often BPD and trauma patients experience referrals as abandonment and may experience any new treatment provider as a safety risk. Often referrals for these patients take multiple sessions to assure safety and ameliorate the perceived loss of relationship.
- **Reluctance to Discuss Trauma**: Often BPD and trauma patients avoid discussion of trauma secondary to fear of re experiencing traumatic memories. The long term benefits of therapy versus the short term costs of re experiencing often need repeated discussion before a BPD or trauma patient agrees to and follow ups on a referral.
- **Therapy can hurt at least in the short run**! Therapy often leads to re experiencing traumatic memories consciously and in nightmares. Again, the long term benefits of therapy versus the short term costs of re experiencing often need repeated discussion before a BPD or trauma patient agrees to and follow ups on a referral.

Prevention: BPD Behavior in Children and Adolescents Often Persists in Adults

- Background: controversy remains regarding the validity and diagnosis of the BPD prior to adulthood.
- 18 studies satisfied the inclusion criteria.
- **Conclusions: Studies indicate that borderline pathology prior to the age of 19 years is predictive of long-term deficits in functioning, and that a considerable proportion of individuals continue to manifest borderline symptoms up to 20 years later.**
- **These findings provide support for the clinical utility of the BPD in younger populations**, and suggest that an early intervention approach may be warranted.

Winsper, Marwaha, Lereya et al., 2015

TF-CBT

- TF-CBT was developed by Drs. Anthony Mannarino, Judith Cohen and Esther Deblinger.
- TF-CBT is an evidence-based treatment that has been evaluated and refined during the past 25 years to help children and adolescents recover after trauma.
- TF-CBT is a **structured, short-term treatment** model that effectively improves a range of trauma-related outcomes in 8-25 sessions with the child/adolescent and caregiver.
- Although TF-CBT is highly effective at improving youth posttraumatic stress disorder (PTSD) symptoms and diagnosis, a **PTSD diagnosis is not required in order to receive this treatment.**
- TF-CBT also **effectively addresses many other trauma impacts**, including affective (e.g., depressive, anxiety), cognitive and behavioral problems, as well as improving the participating parent's or caregiver's personal distress about the child's traumatic experience, effective parenting skills, and supportive interactions with the child.

https://www.tfcbt.org/about-tfcbt/

Prevention: Treat Late Adolescent and Early Adult Substance Use

- **BPD traits usually decline from adolescence to adulthood,**
- Comorbid psychopathology such as symptoms of major depressive disorder (MDD), alcohol use disorder (AUD), and drug use disorders (DUDs) are likely disrupt this normative decline.
- Using a longitudinal sample of female twins (N = 1,763), we examined if levels of BPD traits were correlated with changes in MDD, AUD, and DUD symptoms from ages 14–24.
- Higher AUD and DUD symptoms predicted a slower rate of decline of BPD traits from ages 14–24.
- **Substance use problems slow the normative decline in BPD traits.**

Bornovalova, Verhulst, Webber et al., 2018

Main Points

- Personality disorders are seen relatively frequently in primary care and complicate the relationship between patients and health care professionals, increase the risk of premature mortality, and result in a huge cost to society.
- The DSM 5 and ICD 11 BPD is characterized by intense emotional experiences and instability in relationships and behavior that begins in early adulthood.
- BPD is strongly associated with childhood trauma, trauma can cause long acting effects that we have previously described as personality pathology.
- Trauma Spectrum Disorders include BPD, PTSD, a subgroup of major depression and Dissociative Identity Disorder with similar stress induced neurobiology.
- Gene and environment interaction are likely to cause BPD.

Main Points (2)

- Gene variants or epigenetic changes that affect HPA axis regulation may increase the risk of BPD.
- BPD screening is simple and time efficient.
- BPD clinical management: team up with significant others and other staff, emphasize safety in all interactions, remember that most people with BPD will eventually get better and treat co-occurring disorders.
- There is one evidence based therapy for BPD relatively available in US, but other psychotherapies and mindfulness can be useful.
- Referral to mental health treatment for patients with trauma histories needs care, understanding, time and planning.
- Trauma focused CBT and substance use disorder treatment among youth may be preventative for BPD.

Thank You

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Appendix

History of BPD

- The term "borderline" was first used by US psychoanalyst Adolph Stern in 1938 to describe a tendency to regress into **"borderline schizophrenia**“.
- By the 1970s, psychoanalysts like Otto Kernberg defined borderline as a **middle level of personality organization between psychosis and neurosis.**
- During that era the symptoms to describe BPD included: **unstable self-image, rapidly fluctuating mood swings, fear of abandonment and strong tendency for both self-harm and suicidal thinking**
- Some considered BPD as a type of mood disorder.
- In 1980, BPD became an official personality disorder in the DSM-III.

DSM 5 Definition of PD

- **A PD is a way of thinking, feeling and behaving that deviates from the expectations of the culture, causes distress or problems functioning, and lasts over time.**
- There are 10 specific types of PDs.
- PDs are long-term patterns of behavior and inner experiences that differs significantly from what is expected.
- **The pattern of experience and behavior begins by late adolescence or early adulthood and causes distress or problems in functioning.**
- Without treatment, PDs can be long-lasting.

https://www.psychiatry.org/patients-families/personality-disorders/what-are-personality-disorders

DSM 5 Definition of PD (2)

- PDs affect at least two of these areas:

Way of thinking about oneself and others,

Way of responding emotionally,

Way of relating to other people,

Way of controlling one's behavior.

https://www.psychiatry.org/patients-families/personality-disorders/what-are-personality-disorders

ICD 11 Definition of PD

- The “traditional” **categorical classification system’s deficiencies and shortcomings are well-known** (Widiger & Samuel, 2005).
- **A dimensional system was planned for DSM 5**, but the categorical model was retained.
- The **ICD 11 moves from a categorical classification of PD to a fully dimensional system**, however, **“borderline pattern descriptor”** was included in the final version (Tyrer, Mulder, Kim et al., 2019).
- The ICD-11 defines PD by “**problems in functioning of aspects of the self** (e.g., identity, self-worth, accuracy of self-view, self-direction), and/or **interpersonal dysfunction** (e.g., ability to develop and maintain close and mutually satisfying relationships, ability to understand others' perspectives and to manage conflict in relationships)” (World Health Organization (WHO), 2018)

ICD 11 Definition of PD (2)

- **Impairment in personality functioning** constitutes the core component of personality disorders distinguishing it from healthy personality as well as from other forms of mental disorders.
- ICD-11 evaluates the severity of the impairment in personality functioning **from no personality pathology through the subsyndromal condition of "personality difficulty" to mild, moderate and severe personality disorder diagnoses**.
- The individual differences between personality disorders are then further defined by pathological personality traits.
- One of the central aims of the new system is to increase clinical utility with the **assessment of severity of impairment informing clinical prognosis and treatment intensity**, while **specific pathological personality traits might help to inform the focus of treatment** (Bach & First, 2018).

ICD 11 Pathological Personality Traits

TRAIT	DESCRIPTION
Negative Affectivity	A tendency to experience a broad range of negative emotions with a frequency and intensity out of proportion to the situation.
Detachment	A tendency to maintain interpersonal distance (social detachment) and emotional distance (emotional detachment)
Dissociality	Disregard for the rights and feelings of others, encompassing both self-centeredness and lack of empathy.
Disinhibition	A tendency to act rashly based on immediate external or internal stimuli (i.e., sensations, emotions, thoughts), without consideration of potential negative consequences.
Anankastia	A narrow focus on one's rigid standard of perfection and of right and wrong, and on controlling one's own and others' behavior and controlling situations to ensure conformity to these standards.

Bach & First, 2018

Adults Can Develop Personality Disorders as a Reaction to Severe Stress

- Early exposure to trauma is a known risk factor for personality disorder (PD), but evidence for late-onset personality pathology following trauma in adults is less clear.
- To investigate whether exposure to war trauma can lead to lasting personality pathology in adults and to compare the mental health and social functioning of people with late–onset personality problems with those with PD.
- Methods: We recruited patients who scored positively on the International Personality Disorder Examination in southern Croatia 15 years after the Croatian war of independence and used a semi-structured interview to establish when the person's personality-related problems arose.
- Results: **Among 182 participants with probable personality disorder, 65 (35.7%) reported that these problems started after exposure to war-trauma as adults.**

Munjiza, Britvic and Crawford, 2019

Adults Can Develop Personality Disorders as a Reaction to Severe Stress (2)

- The most prevalent personality problems among those with late-onset pathology were **borderline**, avoidant, schizotypal, schizoid and paranoid.
- The prevalence of depression and social dysfunction were as high among those with late-onset personality pathology as among those with PD.
- Conclusion: **Retrospective accounts of people with significant personality pathology indicate that some develop these problems following exposure to severe trauma in adulthood.**
- Personality-related problems which start in adulthood may be as severe as those that have an earlier onset.
- These findings highlight the long term impact of war trauma on mental health and have implications for the way that personality pathology is classified and treated (Munjiza, Britvic and Crawford, 2019).

Heritability of Common Psychiatric Disorders

- Family, adoption and twin studies demonstrate that many adult psychiatric disorders, including schizophrenia, major depression and bipolar disorder, have a clear genetic component.

- The etiology of psychiatric disorders is a complex combination of both genetic and environmental components.

- While potential susceptibility genes for psychiatric disorders have been identified, interaction with the environment is a crucial component in disease development.

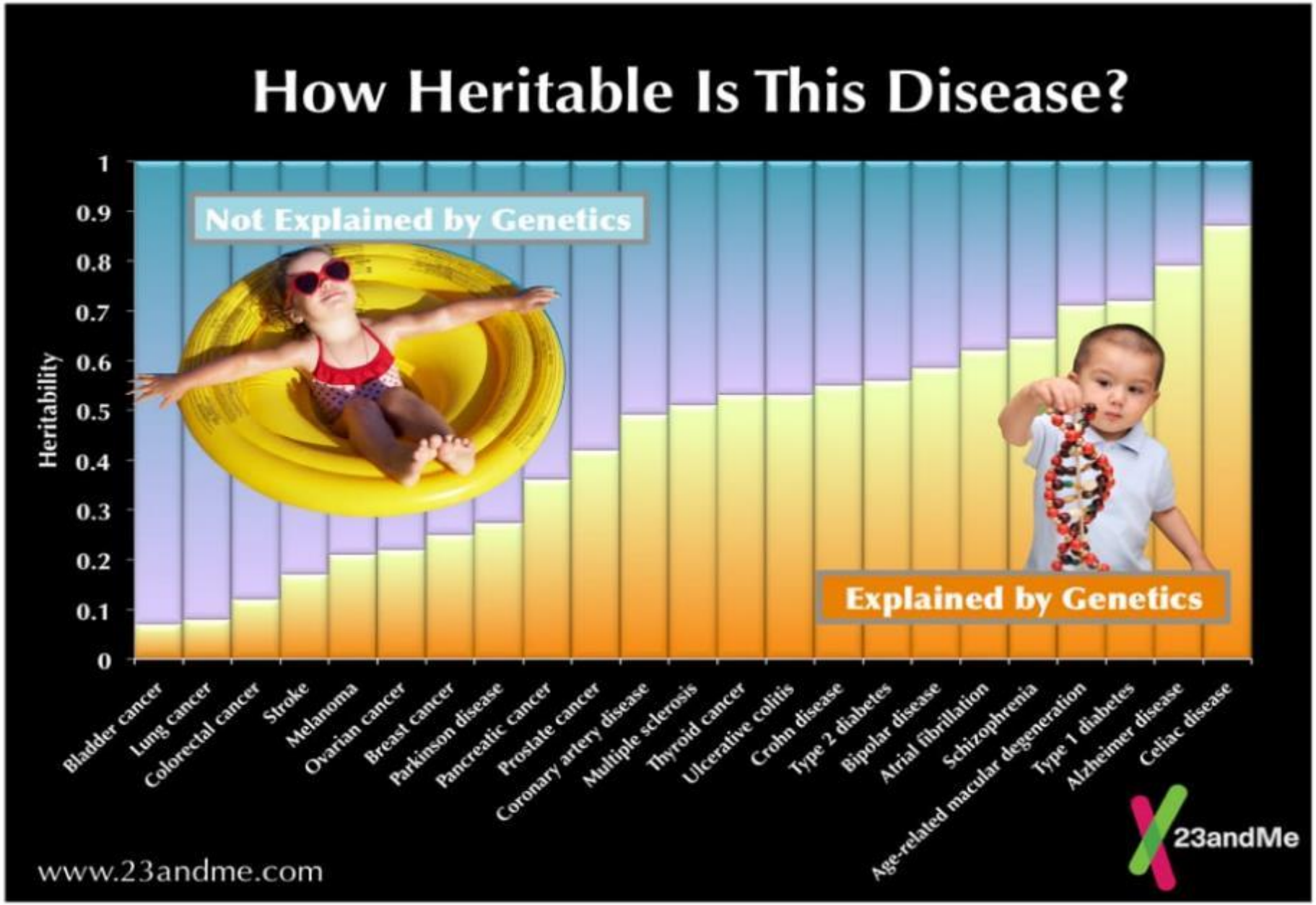
Hill and Sahhar, 2006

Heritability of Common Psychiatric Disorders (2)

1 Heritability estimates for common psychiatric disorders

Psychiatric disorder	Estimate of heritability
Schizophrenia	82%–85%[5,6]
Bipolar disorder	79%–93%[7-9]
Major depression	33%–48%[10-12]
Obsessive compulsive disorder	26%–47%[13,14]
Panic disorder	44%[15]

Heritability of Common Disorders



Heritability of Common Disorders (2)

Table 1 Heritability estimates of various complex diseases and traits

Disease or trait	Heritability	Reference
Eye color	> 99%	[18]
Type 1 diabetes	88%	[19]
Schizophrenia	81%	[20]
Alzheimer's disease	79%	[21]
Height	70-87% (m), 68-85% (w)	[22]
Obesity	65-84% (m), 64-79% (w)	[23]
Smoking persistence	59% (m), 46% (w)	[24]
Anorexia nervosa	56%	[25]
Rheumatoid arthritis	53-65%	[26]
Panic disorder	43%	[27]
Prostate cancer	42%	[28]
Migraine	40-50%	[29]
Heart attack	38% (m), 57% (w)	[30]

McLean Screening Instrument for BPD

1. Have any of your closest relationships been troubled by a lot of arguments or repeated breakups? Yes_____No_____

2. Have you deliberately hurt yourself physically (e.g., punched yourself, cut yourself, burned yourself)? How about a suicide attempt? Yes_____No_____

3. Have you had at least two other problems with impulsivity (e.g., eating binges and spending sprees, drinking too much and verbal outbursts)? Yes_____No_____

4. Have you been extremely moody? Yes_____No_____

5. Have you felt very angry a lot of the time? How about often acted in an angry or sarcastic manner? Yes_____No_____

McLean Screening Instrument for BPD (2)

6. Have you often been distrustful of other people? Yes_____No_____

7. Have you frequently felt unreal or as if things around you were unreal? Yes_____No_____

8. Have you chronically felt empty? Yes_____No_____

9. Have you often felt that you had no idea of who you are or that you have no identity? Yes_____No_____

10. Have you made desperate efforts to avoid feeling abandoned or being abandoned (e.g., repeatedly called someone to reassure yourself that he or she still cared, begged them not to leave you, clung to them physically)? Yes_____No_____

Screen positive = 7 or higher