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Exploring the Biopsychosocial Model for Evaluation of an Acutely Suicidal Patient with Co-occurring Borderline Personality Disorder and Substance Misuse: A Case Study

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Abstract

BACKGROUND: Borderline Personality Disorder (BPD) is a significant public health concern, affecting an estimated 28,725 individuals in Ireland with considerable associated costs. Despite its complexity, the biopsychosocial model offers a comprehensive approach, enabling clinicians to integrate predisposing, precipitating, perpetuating, and protective factors when understanding and managing BPD.

OBJECTIVE: This report presents a case study of a 35-year-old woman with a background of BPD and substance abuse, detailing her biopsychosocial formulation during an episode of acute suicidal ideation.

METHODS:: The case entailed a thorough history and clinical examination, focusing on the biopsychosocial model's 4P causal framework: predisposing, precipitating, perpetuating, and protective factors.

RESULTS: This Predisposing factors were abundant, including family history of mental health disorders and personal history of trauma. Precipitating factors were multi-faceted, encompassing biological vulnerabilities from alcohol abuse and significant recent social stressors, such as unemployment, eviction, custody battles, and bereavement. Perpetuating elements revolved around ongoing legal challenges and deep-seated feelings of guilt. However, protective factors were also present: no co-existing medical conditions, an eventual stable mood post-treatment, and engagement in therapeutic activities, including mindfulness interventions.

CONCLUSION: This case underscores the value of the biopsychosocial model in psychiatric patient care, highlighting its potential to uncover individualized nuances in classic presentations. Embracing this model can optimize holistic care, underscoring its imperative utility in clinical practice.

Case Background

Borderline Personality Disorder (BPD)[1] poses a significant challenge in Ireland, affecting around 28,725 individuals and generating an estimated annual cost of €311.5 million[2]. This dual impact, both personal and financial, underscores the pressing need for a comprehensive approach to address BPD effectively. In this context, the application of the biopsychosocial model offers a promising framework for understanding and managing this complex disorder.

While personality disorders are generally understood to be influenced by unchangeable genetic

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factors, more contemporary literature emphasizes the importance of considering a broader range of factors that contribute to these disorders[3–6]. The biopsychosocial model, with its 4P causal framework (predisposing, precipitating, perpetuating, and protecting factors), equips clinicians with a versatile toolset to navigate the intricacies of BPD. This approach enhances diagnostic precision, guiding tailored interventions and prognostic assessments by comprehensively addressing biological, psychological, and social aspects[7–10]. This holistic model recognizes that health and illness are influenced by biological, psychological, and social factors, allowing for a comprehensive understanding of individuals and their health conditions. Through its patient-centered focus, the biopsychosocial model emphasizes the importance of understanding patients' experiences, beliefs, and social contexts, empowering them to actively participate in their healthcare decisions. Furthermore, it promotes a preventive approach to healthcare by addressing not only biological factors but also psychological and social determinants of health, ultimately leading to better health outcomes and reduced healthcare costs in the long term.

In this case report, a specific patient's experience is examined to illuminate the practical application of the biopsychosocial model in the management of BPD. The goal of this paper is to demonstrate the value of the biopsychosocial model for identifying unique factors contributing to a disorder's complexity and how the model may be utilized as a primary source to focus management plans with.

Case Details

PRESENTING COMPLAINT:

A 35-year-old woman was referred from the Emergency Department to the Acute Psychiatry Unit following a failed suicide attempt. She reported symptoms of low mood, reduced sleep, and suicidal intent on a background of BPD, substance abuse, and suicide attempts that necessitated prior hospitalization in the Acute Psychiatry Unit.

HISTORY OF PRESENTING COMPLAINT:

The most recent suicide attempt involved the overdose ingestion of chlordiazepoxide (a long-acting benzodiazepine, which is a family of sedative drugs administered to treat stress, anxiety, and sleep disorders) and alcohol, which she immediately regretted. Her sister, a social worker, intervened when she attempted to hang herself with a bathrobe belt.

The patient's sister provided additional context, noting that the patient had been consuming 2 bottles of wine daily for the past four months, following their stepfather's death. The sister reported that the patient was heavily intoxicated at her own daughter's birthday party, where she had a nervous breakdown and an altercation with her daughter.

A retrospective exploration of the patient's childhood unveiled a history of instability, marked by parental conflicts, separation from her family, and a tumultuous experience in foster care after her father's rejection of her plea to live with him. Her initiation to alcohol at the age of 15 set the stage for a 15-year history of binge drinking, going up to 10 units of wine at least one day per month, and chronic suicidal ideation, often culminating in impulsive attempts, including wrist-cutting.

FAMILY HISTORY:

Her immediate family history showed a strong presence of alcoholism, schizophrenia, narcissistic personality disorder, anxiety, and depression.

SOCIAL HISTORY:

Despite experiencing an unstable childhood, the patient achieved academic success by earning her leaving certificate from school with distinction. She worked as a self-employed cleaner until her most recent hospital admission. She did not mind her job but was not especially passionate or satisfied with it. She worked by herself. She reported that she lost her clients since her admission and received social welfare payments for unemployment.

The patient had a history of physical, emotional, and sexual abuse from an ex-boyfriend, leading to diminished libido and a sense of unworthiness in relationships. She reported that she "used to be able to have fun" but now felt that she was "not good enough for anyone." "Everyone leaves me,'" she said.

The patient had never married and had three daughters, aged 4, 9, and 11, with different fathers. All the children resided with her, and the patient paid her mother to assist in her children's care during the patient's work hours. The patient lost custody of her youngest daughter during her most recent hospital

admission. She reported that she felt guilty for how her mental illness negatively affected her daughters' lives.

PREMORBID HISTORY:

The patient's sister described the patient as "always distressed" and "constantly threatening to kill herself". The patient felt isolated, distrusted most of her relationships, and coped through avoidance and binge drinking. The patient seemed to have insight into her own condition but limited engagement with mental health services. Her coping patterns suggested an insecure-resistant attachment style[11].

EXAMINATION:

Upon initial presentation, the mental state exam was significant for tearful and tired appearance with poor engagement or eye contact with the interviewer. The patient demonstrated a depressed mood and blunted affect. Cognition was intact. Physical examination revealed nil of significance.

Conducting a mental status examination constitutes a crucial component of psychiatric assessment, encompassing aspects such as appearance, behavior, motor activity, speech, mood, affect, thought process, thought content, perceptual disturbances, cognition, insight, and judgment. This examination serves to detect, diagnose, and track manifestations of mental disorders[13].

MANAGEMENT AND PLAN:

During her admission, the patient received chlordiazepoxide detoxification, fluoxetine (20mg), and zopiclone (7.5mg), which she tolerated well. Benzodiazepines are highly addictive, and a tapered detoxification approach is necessary to decrease withdrawal symptoms. Zopiclone, or other sleep aid, is routinely prescribed to patients to aid in insomnia that can occur in benzothiazepine withdrawal. Fluoxetine is a selective serotonin-reuptake inhibitor, also indicated to help with mood swings and anxiety related to withdrawal[12]. She also attended mindfulness therapies: gardening, sensory walks, and group art classes.

Upon discharge, the patient appeared cooperative, well-kept, and had a stable mood with anxious affect, with no suicidal ideation. Her plan included attending an alcoholic treatment program, securing emergency housing, and regular follow-ups at an outpatient psychiatric clinic.

Discussion

The significant predisposing factors the patient experiences are her family history of mental health disorders, her substance abuse, her history of sexual, emotional, and physical trauma, her experience in the foster care system, her insecure resistant attachment style, and her background of borderline personality disorder. The significant precipitating factors include alcohol abuse, her reduced sleep, her recent unemployment, her eviction from her home, the lost custody of her daughter, the recent death of a close relative, general financial stress, poor coping strategies, and fears of abandonment. Her perpetuating factors included her withdrawal from alcohol and illicit drugs, the ongoing legal battle for custody of her daughter, guilt from maladaptive coping strategies, and guilt from lack of presence in her children's lives. This patient's protective factors include her lack of other medical conditions, her positive response to pharmaceutical treatment, her moving her items from her old apartment, her application to a local alcoholic treatment program and emergency housing after she was discharged, her insight into her own diagnosis, and her positive psychological response to mindfulness therapies.

Conclusion

The formulation of this case demonstrates the applicability of the biopsychosocial model to psychiatric patient care. The patient provided a typical presentation of an acutely suicidal ideation, demonstrated by her recent premeditated attempt of suicide with a high lethality method (hanging) and her intent by leaving a goodbye message to her loved ones; in clinical practice these are the main determinants of a severe acute suicide attempt[14]. Unique dimensions of this case were exposed by using biopsychosocial formulation. Thus, it is imperative for mental health care providers to consider using the biopsychosocial model to provide more holistic care in their practice.

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