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From Phenotype to Treatment Plan: A Stepwise Clinical Approach to Moderate-Severe Major Depressive Disorder with Suicidal Ideation in High-Functioning Adult Patient

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ABSTRACT

Major depressive disorder (MDD) represents a significant public health concern, characterized by high rates of morbidity and functional impairment. This detailed case study provides an in-depth analysis of the assessment, diagnostic formulation, and treatment planning for a 34-year-old female presenting with a classic constellation of depressive symptoms. The patient, reported a three-month history of persistent dysphoria, pervasive anhedonia, neurovegetative disturbances (insomnia, appetite/weight loss, fatigue), and cognitive impairments, alongside passive suicidal ideation. A standardized assessment protocol, incorporating the Patient Health Questionnaire-9 (PHQ-9) and the Beck Depression Inventory (BDI), confirmed symptoms of moderate to severe intensity. Following a structured clinical interview and risk assessment, a primary diagnosis of MDD, single episode, moderate severity (ICD-10: F32.1) was established, with a comorbid provisional diagnosis of generalized anxiety disorder (GAD). This paper delineates an integrated, biopsychosocial treatment plan formulated for the patient. The intervention strategy synergistically combines pharmacotherapy (initiation of the SSRI sertraline), evidence-based psychotherapy (a 16-week protocol of Cognitive-Behavioral Therapy), and targeted lifestyle modifications. The rationale for each treatment modality is explored within the context of current clinical guidelines and the patient's specific presentation. Explicit short-term (1-2 month) and long-term (3-6 month) therapeutic goals are defined, alongside a structured plan for monitoring, safety management, and psychoeducation. The discussion concludes with a prognostic evaluation, emphasizing that consistent adherence to this multimodal framework is associated with a positive outlook for significant symptom remission and functional recovery, while also highlighting the critical importance of relapse prevention strategies in ensuring sustained mental well-being.

Introduction

Major depressive disorder (MDD) is a common, yet complex and debilitating mental illness, ranked as a leading contributor to the global burden of disease (World Health Organization, 2017). Its clinical presentation is heterogeneous, encompassing emotional, cognitive, behavioral, and somatic domains. Core features include persistent low mood or anhedonia, accompanied by a variable constellation of symptoms such as changes in sleep and appetite, fatigue, feelings of worthlessness, diminished concentration, and recurrent thoughts of death (American Psychiatric Association, 2013). The etiology of MDD is multifactorial, involving a dynamic interplay of genetic vulnerability, neurobiological dysregulations (particularly in monoaminergic and neurotrophic systems), psychological factors (e.g., negative cognitive schemas), and environmental stressors (Malhi & Mann, 2018). National Institute for Health and Care Excellence (2022) reported effective management of MDD, particularly in cases of moderate to severe intensity, typically requires a comprehensive, multimodal approach rather than a singular intervention. Contemporary treatment guidelines consistently recommend the integration of pharmacotherapy and psychotherapy as a first-line strategy for moderate-severe episodes, supplemented by adjunctive psychosocial and lifestyle interventions. This integrated framework aligns with the biopsychosocial model of illness, which posits that effective treatment must address biological, psychological, and social dimensions of the disorder (Engel, 1977).

The present case study offers a thorough clinical narrative of a 34-year-old female, who presented with a three-month history of progressively worsening depressive symptoms. The purpose of this paper is threefold: first, to demonstrate a systematic process of clinical assessment and diagnosis using standardized tools and interview techniques; second, to formulate and justify an evidence-based, integrated treatment plan tailored to the patient's specific clinical profile and needs; and third, to discuss the establishment of measurable treatment goals and a realistic prognosis within the context of a collaborative care model. This case exemplifies the practical application of guideline-concordant care in a real-world clinical setting.

Case Presentation

Demographic and Background Information

The patient, is a 34-year-old single female of Caucasian descent employed as a full-time elementary school teacher. She resides alone and reports a limited social support network, as she has gradually withdrawn from friends over recent months. Her family history is significant for psychiatric illness: her mother has a documented history of recurrent major depression, and her father has a history of alcohol use disorder. She denies any personal history of substance abuse and reports no significant medical comorbidities. She is not currently taking any prescription medications. The identified psychosocial stressors include perceived performance pressures at work and increasing social isolation.

Presenting Complaint and History of Present Illness

The patient self-referred to the outpatient mental health clinic, stating, "I just can't shake this sadness and exhaustion. Nothing feels enjoyable anymore." She reported a gradual onset of symptoms approximately three months prior to the assessment, coinciding with the beginning of a new academic semester. She described the symptoms as persistently worsening, now significantly impairing her ability to function in her professional role and maintain daily routines. She expressed particular concern over her inability to concentrate while teaching and her loss of passion for education, which she had previously found deeply meaningful.

Detailed Clinical Presentation and Symptom Analysis

A comprehensive clinical interview revealed symptoms spanning multiple diagnostic domains:

Mood and Affect: Her predominant mood was described as chronically sad and "empty." She exhibited a markedly constricted affect during the interview, with minimal reactivity. She verbalized profound feelings of hopelessness about the future and pervasive self-critical thoughts, stating, "I feel like a complete failure at my job and in my personal life."

Anhedonia: A core and distressing feature was the near-complete loss of interest or pleasure (anhedonia). Activities she once found deeply rewarding, including reading literature, socializing with colleagues, and visiting family, now felt burdensome and meaningless. She reported spending weekends isolated in her home.

Neurovegetative Symptoms:

Sleep: Sarah reported significant insomnia, characterized by both difficulty initiating sleep (lying awake for 1-2 hours) and early morning awakening (awakening at 4:00 AM unable to return to sleep). This resulted in chronic, non-restorative sleep.

Appetite/Weight: She acknowledged a substantial decrease in appetite, often forgetting to eat, and had experienced an unintentional weight loss of approximately 10 pounds (4.5 kg) over two months.

Energy: She reported persistent fatigue and lethargy, describing a feeling of being "drained" even after a full night in bed. This fatigue was paradoxically coupled with psychomotor agitation, manifesting as an inability to relax.

Cognitive Symptoms: Sarah noted significant difficulties with concentration, memory, and executive function. She reported missing appointments, feeling overwhelmed by lesson planning, and an inability to make simple decisions. Her self-esteem was notably low.

Suicidal Ideation: When assessed directly, Sarah admitted to experiencing passive suicidal ideation, such as fleeting thoughts of "not wanting to be here anymore" and "wondering if my family would be better off." She firmly denied any active intent, plan, or history of self-harm behaviors, but expressed fear about the persistence of these thoughts.

Somatic Complaints: She also reported several unexplained physical symptoms that had emerged or worsened concurrently with her mood changes, including frequent tension headaches, generalized muscle aches, and non-specific gastrointestinal discomfort.

Comprehensive Assessment

Diagnostic Measures and Outcomes

A multi-method assessment approach was employed to quantify symptom severity and inform diagnosis.

- **Patient Health Questionnaire-9 (PHQ-9):** Sarah scored 18 on this 9-item self-report measure. According to established cut-offs (Kroenke et al., 2001), a score between 15-19 indicates moderately severe depressive symptomatology.
- **Beck Depression Inventory-II (BDI-II):** Her score on the BDI-II was 32. Interpreting this result with the manual's guidelines (Beck et al., 1996), a score of 29-63 is indicative of severe depression.
- **Structured Clinical Interview:** A diagnostic interview based on ICD-10 criteria confirmed the presence of a depressive episode. Symptoms were present nearly every day for more than two weeks, causing clinically significant distress and impairment in social and occupational functioning. No manic or psychotic features were identified. Features of generalized anxiety, including chronic worry about work performance and social evaluation, were also noted.

Risk Assessment Formulation

A formal risk assessment was conducted. While Sarah denied current suicidal intent or a specific plan, her expression of passive death ideation, coupled with moderate-severe depression, significant anhedonia, and social isolation, placed her at an elevated risk category. The presence of a family history of mood disorder and her stated fear of her own symptoms

further underscored the need for vigilant monitoring. A collaborative safety plan was deemed an immediate priority.

Diagnostic Formulation

Based on the collected data, the following diagnostic conclusions were reached:

- **Primary Diagnosis:** Major Depressive Disorder, Single Episode, Moderate Severity (ICD-10: F32.1). This corresponds to a diagnosis of Major Depressive Disorder, single episode, moderate (DSM-5-TR code 296.22).
- **Secondary/Provisional Diagnosis:** Generalized Anxiety Disorder. This diagnosis is provisionally assigned based on prominent comorbid worry and anxious apprehension about multiple life domains, which appears distinct from but intertwined with the depressive episode.

Differential Considerations/Rule Outs: Substance-induced mood disorder was considered but ruled out based on patient report. Thyroid dysfunction and other general medical conditions were noted for potential future investigation if treatment response is inadequate.

Integrated, Multimodal Treatment Plan

The treatment plan was constructed using a biopsychosocial framework, aiming to intervene at multiple levels of the patient's presentation.

1. Psychotherapeutic Intervention

Cognitive-Behavioral Therapy (CBT) was selected as the foundational psychotherapeutic modality, scheduled for 16 weekly 50-minute sessions (Beck, 2011). The structure and foci are as follows:

- **Initial Phase (Sessions 1-4):** Focus on psychoeducation about the CBT model of depression, establishing a strong therapeutic alliance, and initiating behavioral activation. Sarah will complete activity monitoring logs and collaboratively schedule graded tasks to systematically increase engagement with potentially rewarding activities, thereby targeting anhedonia and withdrawal.
- **Middle Phase (Sessions 5-12):** The core work will involve cognitive restructuring. Sarah will be taught to identify her automatic negative thoughts (e.g., "I'm a failure," "Nothing will ever improve") and the underlying cognitive distortions (e.g., all-or-nothing thinking, disqualifying the positive). Through Socratic questioning and behavioral experiments, she will develop skills to evaluate these thoughts more realistically and develop balanced, adaptive responses.
- **Later Phase (Sessions 13-16):** Therapy will focus on skill consolidation and relapse prevention. This includes developing a personalized toolkit for managing future depressive symptoms, strengthening self-compassion practices to counter self-criticism, and applying learned skills to specific interpersonal challenges, potentially drawing from Interpersonal Therapy techniques if warranted.

2. Pharmacotherapeutic Management

Pharmacotherapy was indicated due to the moderate-severe symptom intensity and significant functional impairment.

- **Medication Selection and Rationale:** Sertraline, a selective serotonin reuptake inhibitor (SSRI), was initiated at 50 mg orally daily. SSRIs are a first-line pharmacological treatment for MDD due to their established efficacy, tolerability, and safety profile in overdose (Davidson, 2010). Sertraline has demonstrated particular utility in treating co-occurring depressive and anxiety symptoms, making it a suitable choice given Sarah's clinical profile.
- **Dosing and Monitoring Plan:** The plan includes a review after 4 weeks to assess therapeutic response and side effects. If tolerated but with partial response, the dose will be increased to 100 mg daily. Common initial side effects (e.g., nausea, insomnia, sexual dysfunction) were discussed proactively to enhance adherence.

- **Adjunctive Strategies:** If insomnia remains problematic after 2-4 weeks, the addition of a low dose of mirtazapine (15 mg at bedtime) could be considered for its sedating and appetite-stimulating properties. The use of benzodiazepines for anxiety was discouraged for long-term management but noted as a potential short-term option only in cases of severe, acute anxiety exacerbation.

3. Adjunctive Lifestyle and Psychosocial Interventions

To support core treatments and promote overall well-being, structured lifestyle recommendations were provided:

- **Supervised Exercise Prescription:** Sarah was encouraged to engage in graded aerobic exercise, with a goal of 30 minutes of moderate-intensity activity (e.g., brisk walking, swimming) three to four times per week. Exercise has demonstrated antidepressant effects through neurobiological and psychological mechanisms (Schuch et al., 2016).
- **Structured Sleep Hygiene Protocol:** A detailed sleep plan was co-created, mandating a consistent wake-up time, elimination of in-bed activities other than sleep, reduction of caffeine after 12:00 PM, and implementation of a 30-minute wind-down routine before bed.
- **Nutritional Consultation:** Given her significant weight loss and poor appetite, a referral to a registered dietitian was made to develop a practical meal plan focusing on nutrient-dense, easily prepared foods to stabilize weight and support neurological health.

4. Monitoring, Safety, and Psychoeducation Framework

- **Session Frequency:** Intensive monitoring via weekly CBT sessions and bi-weekly 15-20 minute medication management appointments with the prescribing psychiatrist for the first 8-12 weeks.
- **Safety Planning:** A written safety plan was collaboratively developed during the first session. It included: (1) recognition of personal warning signs, (2) internal coping strategies, (3) social contacts to distract or seek support from, (4) contact information for her therapist and clinic, and (5) emergency numbers/crisis services.
- **Systematic Psychoeducation:** Sarah received education on the neurobiological and psychological underpinnings of MDD, the expected timeline for medication effects (2-4 weeks for initial response, 6-8 weeks for fuller effect), the importance of treatment adherence even after feeling better, and the concept of relapse prevention.

Explicit Treatment Goals and Outcomes

Short-Term Goals (To be achieved within 1-2 months of treatment initiation)

1. **Symptom Reduction:** Achieve a 50% reduction in PHQ-9 score, moving from 18 to a score of 9 or below.
2. **Behavioral Activation:** Increase structured activity by engaging in at least two planned, non-work related activities per week, one of which should involve social contact.
3. **Sleep Improvement:** Adhere to the sleep hygiene protocol and report a subjective improvement in sleep quality, with a reduction in early morning awakening to no more than two mornings per week.
4. **Safety:** Maintain no escalation in suicidal ideation and utilize the safety plan if distressing thoughts occur.

Long-Term Goals (To be achieved within 3-6 months)

1. **Symptom Remission and Functional Restoration:** Sustain a PHQ-9 score in the minimal range (<5) and report a return to pre-morbid levels of occupational and social functioning. This includes feeling capable and engaged at work and resuming regular social engagements.
2. **Skill Mastery and Autonomy:** Demonstrate the independent use of CBT techniques (e.g., thought records, behavioral scheduling) to navigate normal life stressors without triggering a significant depressive downturn.

3. **Relapse Prevention:** Identify a personalized set of early warning signs for depression and create a written action plan to implement at the first sign of recurrence, thereby reducing the severity and duration of future episodes.

Prognostic Discussion

The prognosis with comprehensive treatment is considered guarded but favorable**.**

Positive prognostic indicators include:

- the relatively acute onset of her first major depressive episode,
- her high level of pre-morbid functioning and strong vocational identity,
- her apparent insight and motivation for treatment as evidenced by self-referral, and
- the absence of comorbid personality disorders or active substance abuse. The strong genetic loading (family history) is a notable risk factor for a more recurrent course.

The cornerstone of a positive outcome is consistent adherence to the integrated treatment plan. Research indicates that combined treatment (CBT + SSRI) yields superior outcomes for moderate-severe MDD compared to either modality alone (Cuijpers et al., 2020). Potential challenges include side effects from medication, the cognitive effort required in early therapy sessions, and navigating interpersonal stressors. Success will be contingent on a strong therapeutic alliance, regular monitoring to adjust the plan as needed, and a sustained focus on relapse prevention strategies after acute symptoms remit. Long-term management may involve transitioning to maintenance CBT sessions and considering longer-term pharmacotherapy given her family history.

Conclusion

This case study of S. M. illustrates the intricate clinical presentation of moderate-severe major depressive disorder and the systematic process required for its effective management. Through a thorough assessment utilizing standardized tools, a clear diagnostic formulation was established, guiding the development of a multimodal treatment plan. This plan, integrating evidence-based psychotherapy, pharmacotherapy, and lifestyle interventions within a biopsychosocial framework, exemplifies contemporary best-practice guidelines. The establishment of specific, measurable goals provides a roadmap for treatment and a means to evaluate progress. While MDD is a serious condition, this case underscores that with a comprehensive, collaborative, and persistently applied treatment strategy, significant recovery and a return to functional well-being are achievable objectives. Future follow-up would be essential to evaluate long-term outcomes and the effectiveness of the implemented relapse prevention plan.

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. https://doi.org/10.1176/appi.books.9780890425596

Beck, A. T. (2011). *Cognitive behavior therapy: Basics and beyond (2nd ed.)*. Guilford Press.

Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Beck Depression Inventory-II (BDI-II).* Psychological Corporation.

Cuijpers, P., Noma, H., Karyotaki, E., Cipriani, A., & Furukawa, T. A. (2020). *Effectiveness and acceptability of cognitive behavior therapy delivery formats in adults with depression: A network meta-analysis*. JAMA Psychiatry, 77(7), 700–707. https://doi.org/10.1001/jamapsychiatry.2020.0048

Davidson, J. R. (2010). *Major depressive disorder treatment guidelines in America and Europe.* The Journal of Clinical Psychiatry, 71(Suppl E1), e04. https://doi.org/10.4088/JCP.9058se1c.04gry

Engel, G. L. (1977). *The need for a new medical model: A challenge for biomedicine.* Science, 196(4286), 129–136.

Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine,* 16(9), 606–613. https://doi.org/10.1046/j.1525-1497.2001.016009606.x

Malhi, G. S., & Mann, J. J. (2018). *Depression. The Lancet,* 392(10161), 2299–2312. https://doi.org/10.1016/S0140-6736(18)31948-2

National Institute for Health and Care Excellence (NICE). (2022). *Depression in adults: Treatment and management* (NICE Guideline No. 222). https://www.nice.org.uk/guidance/ng222

Schuch, F. B., Vancampfort, D., Richards, J., Rosenbaum, S., Ward, P. B., & Stubbs, B. (2016). *Exercise as a treatment for depression: A meta-analysis adjusting for publication bias.* Journal of Psychiatric Research, 77, 42–51. https://doi.org/10.1016/j.jpsychires.2016.02.023

World Health Organization. (1992). T*he ICD-10 classification of mental and behavioural disorders: Clinical descriptions and diagnostic guidelines.* World Health Organization.

World Health Organization. (2017). *Depression and other common mental disorders: Global health estimates*. https://apps.who.int/iris/handle/10665/254610