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Anhedonia is a Symptom of Severe Depression and Generalized Anxiety Disorder

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ABSTRACT: Anhedonia, defined as the reduced ability to experience pleasure, is a core symptom of major depressive disorder (MDD) and is increasingly recognized as a transdiagnostic marker that bridges depressive and anxiety disorders. This report presents the case of a 16-year-old Indonesian girl who exhibited pervasive sadness, irritability, fatigue, and marked anhedonia characterized by complete disengagement from competitive swimming, a central aspect of her self-identity. Psychosocial stressors, including parental conflict and academic pressure, preceded the escalation of symptoms. Clinical assessment revealed a severe depressive episode, with a Hamilton Depression Rating Scale (HDRS) score of 24 and significant anhedonia confirmed by the Snaith–Hamilton Pleasure Scale (SHAPS). Neurological and laboratory examinations were unremarkable. The patient was diagnosed with severe MDD (F32.2) and comorbid generalized anxiety disorder (F41.1) according to PPDGJ-III and DSM-5 criteria. Treatment included sertraline (up to 50 mg/day), short-term clobazam, and supportive psychotherapy with family intervention. At four-week follow-up, depressive symptoms improved, accompanied by partial recovery of motivation and social engagement. This case highlights anhedonia as a clinically prominent and functionally impairing symptom in adolescent depression and anxiety. Beyond its emotional dimension, anhedonia reflects a disruption of reward processing that contributes to poor academic, social, and developmental outcomes. Routine assessment of anhedonia using structured instruments such as SHAPS and culturally sensitive interviews may improve diagnostic precision and guide personalized treatment. Early detection and integrative interventions—combining pharmacological, psychotherapeutic, and family-based approaches—are essential for optimizing recovery and preventing long-term disability in adolescent mood disorders.

Keywords: Anhedonia, Major Depressive Disorder, Anxiety, Adolescents, Reward System, Case Report.

INTRODUCTION

Anhedonia, defined as a markedly diminished ability to experience pleasure, is a core and debilitating feature of major depressive disorder (MDD) and a transdiagnostic marker found across psychiatric conditions such as bipolar disorder, schizophrenia, and generalized anxiety disorder (GAD) (Pizzagalli, 2024; Shankman & Gorka, 2015; Whitton et al., 2015). Beyond a subjective loss of interest, anhedonia

represents measurable deficits in motivation, reward anticipation, and emotional engagement—particularly impactful in adolescents undergoing rapid neurobiological and psychosocial development (Casey et al., 2008).

Globally, depression is a leading cause of disease burden among adolescents, affecting over 34 million youth and contributing significantly to disability and suicide risk (Organization, 2021). Anhedonia has been identified as one of the strongest predictors of persistent functional impairment and risk of chronicity in youth (McMakin et al., 2012; Rawal et al., 2013). During adolescence—a period marked by heightened reward sensitivity and identity formation—anhedonia interferes with motivation, academic functioning, social connectedness, and emotional growth (Hubley, 2016; Winer, 2014).

Neurobiologically, anhedonia is associated with dysfunction in the mesocorticolimbic reward circuit, including the ventral tegmental area, nucleus accumbens, and medial prefrontal cortex, resulting in impaired dopaminergic signaling (Berridge & Kringelbach, 2015; Dillon & Pizzagalli, 2018; Treadway & Zald, 2013). Neuroimaging studies demonstrate reduced striatal activation during reward anticipation in individuals with depression and comorbid anxiety, suggesting overlapping neural pathways underlying reward deficits and anxious avoidance (Dillon & Pizzagalli, 2018; Hirsch et al., 2020). Dysregulation of serotonin, glutamate, and GABA systems further interacts with inflammatory and hormonal mechanisms, worsening emotional learning and motivation (Der-Avakian & Markou, 2019).

Clinically, adolescent anhedonia may be overlooked or misinterpreted as typical adolescent behavior or academic stress, leading to delayed identification and treatment (Zhang et al., 2021). In non-Western settings, emotional distress often presents somatically rather than verbally, resulting in youth presenting with fatigue, irritability, and social withdrawal rather than sadness (Ryder, 2021). In Indonesia, cultural norms emphasizing emotional restraint, academic achievement, and family harmony can mask internal emotional experiences, further delaying psychiatric referral and intervention (Wiguna et al., 2020).

Epidemiological data highlight the importance of early detection. A major Indonesian study found that 16%–20% of adolescents experience clinically significant depressive symptoms, with nearly half reporting decreased participation in social or recreational activities—an indicator strongly associated with anhedonia (Wiguna et al., 2020). Yet standardized instruments, such as the Snaith–Hamilton Pleasure Scale (SHAPS) and Temporal Experience of Pleasure Scale (TEPS), remain underused in Southeast Asian clinical practice despite strong psychometric evidence (Der-Avakian & Markou, 2019; Rawal et al., 2013).

Comorbidity between depression and anxiety in adolescents is high, with estimates up to 75% in clinical settings (Shankman & Gorka, 2015). Persistent amygdala activation and impaired prefrontal–striatal connectivity contribute to both reduced reward processing and heightened threat responses (Dillon & Pizzagalli, 2018; Hirsch et al., 2020), reflecting disruption of the salience network's role in detecting and prioritizing emotionally relevant stimuli (Seeley, 2019).

Cultural factors further shape symptom expression. In collectivistic cultures like Indonesia, pleasure is closely linked to social connection, meaning withdrawal from group-based activities may be a stronger indicator of anhedonia than reduced engagement in solitary hobbies (Ryder, 2021; Zhang et al., 2021). Thus, clinicians must adopt culturally sensitive frameworks and screening approaches.

Given these biopsychosocial complexities, routine assessment of anhedonia alongside mood and anxiety symptoms is crucial. Early detection using culturally appropriate screening tools, combined with psychoeducation for families and schools, can promote timely help-seeking and reduce stigma (Carvalho et al., 2014; Organization, 2021). This case report illustrates the role of anhedonia as a diagnostic hallmark and treatment priority in adolescent depression, emphasizing the need for integrative, culturally responsive care strategies.

RESULT AND DISCUSSION

A 16-year-old Indonesian girl presented to the psychiatric clinic with a six-month history of pervasive sadness, persistent fatigue, and markedly reduced interest in activities once enjoyed. Most notably, she demonstrated complete withdrawal from competitive swimming, a structured extracurricular activity that had been central to her identity and daily routine for more than five years. Prior to symptom onset, the patient trained regularly at a regional sports club and frequently participated in competitive events. Her abrupt disengagement and loss of enjoyment represented a significant functional decline, consistent with clinically meaningful anhedonia (Rawal et al., 2013).

In addition to loss of interest, the patient reported diminished appetite, early morning awakening, impaired concentration, social withdrawal, and feelings of guilt and worthlessness. Anxiety symptoms were prominent, including excessive worry about academic performance, restlessness, and physical tension. The patient also endorsed episodic somatic complaints such as headaches and abdominal discomfort, aligning with literature suggesting somatic expressions of distress are common among adolescents in collectivistic cultures (Ryder, 2021; Zhang et al., 2021).

The patient's mood symptoms had first emerged at age 14 with fluctuating severity, and episodes were often triggered by interpersonal stress and academic demands. Passive thoughts of death were reported during periods of severe distress, although no active suicidal ideation or self-harm behavior was identified. Family history was significant for recurrent depressive symptoms in the father, raising concern for heritable vulnerability to mood dysregulation (Alloy et al., 2009).

Mental status examination revealed a tearful and withdrawn adolescent with psychomotor retardation, reduced eye contact, and a constricted affect. Speech was slow but coherent, and thought processes were goal directed. No perceptual disturbances or manic symptoms were noted. Cognitive functions including orientation and memory were intact, though attention and processing speed appeared reduced.

The Hamilton Depression Rating Scale (HDRS) score was 24, indicating severe depressive symptoms. The Snaith–Hamilton Pleasure Scale (SHAPS) score was elevated, supporting the presence of clinically significant anhedonia consistent with neurobiological disruption in reward processing pathways (Berridge & Kringelbach, 2015; Pizzagalli, 2024). Routine laboratory examinations and neurological evaluations yielded unremarkable results, reducing suspicion of organic contributors.

Diagnosis was established as Major Depressive Disorder, severe episode (F32.2), with prominent anhedonia, and comorbid Generalized Anxiety Disorder (F41.1), based on DSM-5 and PPDGJ-III criteria. Differential diagnoses considered included adjustment disorder and bipolar spectrum disorder

given episodic symptom patterns and family history; however, no history of hypomanic episodes or mood elevation was identified.

The patient was initiated on sertraline, titrated up to 50 mg/day, consistent with first-line treatment recommendations for adolescent depression (Carvalho et al., 2014). Short-term clobazam was provided to manage initial anxiety and sleep disturbance. Supportive psychotherapy emphasizing emotional validation, behavioral activation, and stress-coping strategies was initiated, along with psychoeducation for the family to reduce stigma and enhance treatment adherence (McMakin et al., 2012). A school-based counseling referral was recommended to support academic reintegration and monitor social functioning.

At four-week follow-up, partial improvement in mood, energy, and sleep was observed. The patient demonstrated increased participation in daily routines and began re-engaging with peers, although motivational deficits and reduced pleasure persisted, consistent with literature indicating gradual recovery of reward sensitivity in adolescent depression (Hubley, 2016). Continued psychotherapy and medication titration were planned to support sustained functional and emotional recovery.

Neurobiological Mechanisms of Anhedonia

Anhedonia is increasingly conceptualized not merely as a subjective emotional deficit but as a measurable disruption of the brain's reward and motivation systems. Central to this dysfunction is the mesocorticolimbic pathway, which includes dopaminergic projections from the ventral tegmental area (VTA) to the nucleus accumbens (NAc), amygdala, hippocampus, and prefrontal cortex (Berridge & Kringelbach, 2015; Russo & Nestler, 2013; Treadway & Zald, 2013) . Dysregulation within this network results in reduced motivation, impaired reward anticipation, and diminished capacity to experience pleasure.

Dysregulated Dopamine Pathways

Dopamine transmission plays a pivotal role in reward prediction and reinforcement learning. Neuroimaging studies have consistently shown reduced dopaminergic signaling and blunted striatal activation in individuals with depressive disorders and anxiety symptoms (Dillon & Pizzagalli, 2018). These abnormalities contribute to decreased reward sensitivity, especially during tasks involving anticipation rather than consumption of reward, demonstrating a particular impairment in motivational drive rather than merely emotional enjoyment.

Interaction With Serotonergic, Glutamatergic, and GABAergic Systems

While dopamine remains central to reward processing, other neurotransmitter systems modulate this circuitry. Serotonin affects mood regulation and behavioral inhibition, glutamate influences neuroplasticity and learning, and GABA contributes to inhibitory control and emotional balance (Der-

Avakian & Markou, 2019). Imbalances in these systems may interact synergistically, amplifying reward-proce

Treatment Strategies for Anhedonia

Management of anhedonia in adolescents requires an integrated, multimodal approach combining pharmacological, psychotherapeutic, psychosocial, and lifestyle-based interventions (Bora & Berk, 2016). Although selective serotonin reuptake inhibitors (SSRIs) remain first-line treatment for adolescent major depressive disorder, emerging evidence shows that anhedonia may respond differently to conventional antidepressants due to its unique neurobiological underpinnings (Carvalho et al., 2014; Pizzagalli, 2024).

Pharmacological Interventions

SSRIs such as sertraline are commonly used in adolescent depression treatment due to their favorable safety profile (Carvalho et al., 2014). However, because SSRIs primarily target serotonergic pathways, they may produce only partial improvement in reward-processing deficits. This was reflected in the present case, where mood improved after four weeks but motivational impairment persisted.

Medications targeting dopaminergic and glutamatergic systems have shown benefit in addressing anhedonia specifically. Bupropion, a norepinephrine–dopamine reuptake inhibitor, has demonstrated efficacy in adults with prominent anhedonia, although pediatric evidence remains limited. Low-dose ketamine and esketamine show promise in rapidly improving reward sensitivity by enhancing synaptic plasticity, but concerns about safety and long-term neurodevelopment restrict routine use in adolescents (Pizzagalli, 2024). Short-term benzodiazepines, such as clobazam, may be considered to manage acute anxiety or insomnia but should be used cautiously to avoid dependence.

Psychotherapeutic Approaches

Psychotherapy plays a critical role in restoring reward-seeking behavior and emotional engagement. Cognitive-behavioral therapy (CBT) helps challenge negative beliefs and cognitive biases that diminish reward expectations (McMakin et al., 2012). Behavioral Activation (BA), an evidence-based intervention targeting withdrawal and inactivity, is particularly effective for anhedonia, as it systematically increases exposure to rewarding experiences and re-establishes positive reinforcement (Rawal et al., 2013).

Mindfulness-based cognitive therapy (MBCT) and acceptance-commitment therapy (ACT) may help adolescents cultivate emotional awareness and psychological flexibility, particularly when comorbid anxiety contributes to avoidance behavior (Hirsch et al., 2020).

Family and School-Based Interventions

Family involvement is essential in collectivistic cultures like Indonesia. Psychoeducation is critical to help families understand that anhedonia reflects a neurobiological condition, not laziness or lack of discipline (Ryder, 2021). Family support enhances treatment adherence and emotional safety for the adolescent.

Schools also play an important role in early detection and recovery. Counseling services, gradual reintegration into academic activities, flexible academic planning, and structured peer support can significantly improve functional outcomes (Wiguna et al., 2020).

Lifestyle and Digital Interventions

Non-pharmacological strategies such as regular exercise, adequate sleep, sunlight exposure, and structured routines support neuroplasticity and improve mood regulation (Berridge & Kringelbach, 2015). Digital mental-health tools—including mood-tracking apps and online behavioral activation programs—offer supplemental support and help maintain treatment gains.

Cultural and Psychosocial Considerations

The clinical presentation and treatment trajectory of anhedonia in adolescents cannot be fully understood without examining cultural and psychosocial dynamics. In collectivistic societies such as Indonesia, psychological distress is frequently expressed through somatic complaints rather than open emotional articulation (Ryder, 2021). Adolescents who struggle with internal dysphoria, emptiness, or loss of interest may instead report headaches, fatigue, or gastrointestinal discomfort, which can delay psychiatric recognition and intervention.

Cultural narratives emphasizing emotional resilience, family harmony, and academic achievement may further shape help-seeking behavior. The internalization of values such as *sabar* (patience) and *nrimo* (acceptance) often leads youths to conceal emotional struggles to avoid disrupting family stability or being perceived as lacking spiritual strength (Zhang et al., 2021). As a result, anhedonia may be misinterpreted as laziness, lack of gratitude, or poor discipline rather than a neurobiological symptom of mood disorder.

Family structure also plays a significant role. Indonesian adolescents typically maintain strong dependence on family support, and parental responses to emotional distress significantly influence treatment engagement. When parents attribute symptoms to behavioral issues rather than mental health conditions, adolescents may experience invalidation and reduced motivation for treatment. Conversely, psychoeducation that frames anhedonia as a brain-based condition, not moral weakness, supports adherence and recovery.

Social and school environments further impact outcomes. School-based stigma around mental health can lead to isolation or bullying, exacerbating social withdrawal. Academic pressure—intensified by competitive university pathways—may accelerate emotional burnout, especially in students with perfectionistic traits. Collaborative involvement from schools, including counseling services, flexible

academic plans, and peer-support programs, can promote early identification and protective social engagement (Wiguna et al., 2020).

Religious coping represents an important protective mechanism in Indonesian cultures. When integrated appropriately within treatment frameworks, spiritual practices can enhance meaning-making, emotional acceptance, and resilience. However, spiritual interpretations that equate depression with weak faith or inadequate prayer may create guilt and delay treatment. Clinicians must navigate these beliefs respectfully, aligning medical intervention with culturally meaningful spiritual strengths.

Overall, culturally attuned assessment and intervention are crucial for optimizing treatment outcomes in Indonesian adolescents with anhedonia. This includes validating emotional symptoms, involving family systems, reducing stigma, integrating school support, and leveraging culturally appropriate coping strategies.

Psychological Models of Anhedonia

Beyond neurobiological abnormalities, several psychological frameworks help explain the development and persistence of anhedonia in adolescents. These models offer insight into how cognitive, behavioral, and emotional processes interact to impair motivation and pleasure.

Cognitive–Behavioral Model

According to cognitive theory, individuals with depression often hold negative core beliefs about themselves, the world, and the future. These beliefs shape dysfunctional thought patterns that reduce the perceived value of rewarding experiences (Beck, 1997). Adolescents experiencing anhedonia may anticipate failure, disappointment, or rejection, thus avoiding once-interesting activities and reinforcing motivational loss (McMakin et al., 2012).

This model aligns with the present case, where the patient's self-critical thinking and academic pressure contributed to withdrawal and reduced pleasure. Intervention through CBT aims to challenge maladaptive thoughts, increase engagement in valued activities, and rebuild reward expectancy.

Behavioral Model

Behavioral theories highlight reduced response-contingent positive reinforcement. According to Lewinsohn's behavioral model, depression arises when rewarding environmental interactions diminish (Lewinsohn, 1974). Among adolescents, stress from academic demands, family conflict, or social pressure may reduce positive reinforcement and increase avoidance behaviors. Over time, disengagement decreases opportunities for pleasure, causing a downward cycle.

Behavioral Activation (BA) — emphasizing structured re-engagement with rewarding activities — is effective in reversing this process (Rawal et al., 2013).

Emotion Regulation Model

Anhedonia has been linked to impaired emotion regulation. Adolescents may struggle to identify, process, and express emotions, instead resorting to suppression or withdrawal. Difficulties tolerating distress can limit engagement in challenging or uncertain activities, further reducing exposure to rewarding experiences (Hirsch et al., 2020).

Developmental and Attachment Models

Developmental theories emphasize the role of early relationships in shaping reward processing. Emotional invalidation, inconsistent caregiving, or chronic criticism may impair a child's ability to derive pleasure from social engagement and achievement (Ryder, 2021). Adolescents internalizing perfectionistic standards or conditional affection may experience pleasure only when meeting high expectations — making them vulnerable to reward-loss patterns during academic failure or interpersonal conflict.

Psychodynamic Perspective

Psychodynamic theorists suggest that anhedonia reflects internalized conflict, unresolved grief, or disrupted self-esteem structures. Freud described anhedonia as a "mourning without object," where emotional energy becomes blocked after real or symbolic loss. In adolescents, identity formation and relational tensions may evoke unconscious defenses such as emotional numbing or withdrawal (Zhang et al., 2021).

Integrated Understanding

These models converge to illustrate how cognitive distortions, reduced reinforcement, emotional dysregulation, and developmental factors collectively fuel anhedonia. Integrating psychological and neurobiological perspectives allows clinicians to tailor interventions to both brain-based processes and emotional-behavioral patterns.

Functional and Academic Consequences in Adolescents

Anhedonia in adolescence has profound implications for academic performance, social development, and long-term psychosocial functioning. Unlike adults, adolescents are in critical developmental periods where motivation, peer interaction, and identity formation play central roles in shaping future outcomes.

Impact on Academic Performance

Anhedonia diminishes intrinsic motivation, curiosity, and cognitive engagement, resulting in reduced participation, impaired concentration, and declining academic performance (Hubley, 2016). Adolescents

may struggle to initiate tasks, sustain effort, or complete academic responsibilities due to impaired reward anticipation and decreased executive functioning.

Teachers and parents may misinterpret this loss of motivation as laziness or defiance, increasing shame and self-criticism. Without early recognition, students risk academic decline, absenteeism, and disengagement from educational environments, which may threaten future academic pathways.

Social Withdrawal and Interpersonal Difficulties

Adolescence is a period during which social affiliation and peer bonding are key developmental tasks. Anhedonia disrupts interest in social interaction, leading to social withdrawal, diminished peer support, and loneliness (Rawal et al., 2013). Reduced engagement in extracurricular activities eliminates opportunities for:

- Social reinforcement
- Skill development
- Identity building
- Self-esteem enhancement

In collectivistic societies like Indonesia, reduced participation in family and community activities may further isolate adolescents and intensify familial concern or criticism, as social connectedness is seen as a moral expectation (Ryder, 2021).

Emotional and Identity Development

Anhedonia interferes with identity formation by limiting engagement in activities that normally foster self-discovery and competence. Adolescents may experience a blunted sense of meaning, future aspirations, and personal identity. Sustained loss of pleasure reduces opportunities to experience mastery, success, and belonging, contributing to fragile self-esteem and difficulties in emotional maturation.

Risk for Long-Term Psychopathology

Persistent anhedonia is associated with:

- Higher risk of chronic depression
- Increased suicidality (Winer, 2014)
- Poorer response to psychotherapy (McMakin et al., 2012)
- Reduced occupational functioning in adulthood

Early-onset anhedonia may act as both a symptom and a trait-level vulnerability, predicting recurrent affective episodes and long-term functional impairment.

Illustration in Current Case

Consistent with research, the patient in this report withdrew from competitive swimming — a core source of identity, structure, and social connection. Her withdrawal reflects not fatigue but a motivational deficit, underscoring the importance of early detection and functional monitoring in adolescents presenting with loss of interest.

Future Directions and Research Implications

Anhedonia in adolescents remains an emerging research priority, particularly in low- and middle-income countries such as Indonesia where cultural, socioeconomic, and systemic variables may shape symptom expression, diagnosis, and intervention. Despite increasing global attention, substantial gaps persist in understanding developmental trajectories, neurobiological mechanisms, and culturally appropriate treatment strategies.

Need for Longitudinal and Neurodevelopmental Studies

Long-term longitudinal research is needed to determine whether anhedonia functions as a state-dependent symptom or a stable trait predicting recurrent depressive and anxiety episodes. Emerging evidence suggests that adolescent-onset anhedonia may confer long-term vulnerability for chronic affective illness, impaired functioning, and suicidal behavior (Winer, 2014). Neurodevelopmentally informed studies incorporating neuroimaging, reward-processing tasks, and biomarker evaluation may clarify whether early interventions can modify reward-circuit maturation and improve long-term outcomes (Haber & Knutson, 2010).

Cultural and Contextual Factors

Most research on anhedonia has been conducted in Western settings; cross-cultural studies are urgently needed. Cultural norms influence how adolescents express emotional distress, how families conceptualize mental illness, and when they seek help. Indonesian youth may somatize or internalize symptoms due to stigma, religious interpretations, or academic pressure (Ryder, 2021). Future research should explore culturally adapted screening tools, local idioms of distress, and family-centered interventions to enhance detection and reduce treatment gaps.

Innovative and Precision-Based Treatments

Advances in neurobiological understanding support exploration of individualized treatment pathways. Future work may examine:

- Biomarker-based treatment selection
- Dopaminergic and glutamatergic augmentation strategies for refractory anhedonia
- Non-invasive neuromodulation (e.g., transcranial magnetic stimulation)
- Digital mental-health tools for motivation tracking and behavioral activation
- Psychotherapeutic models integrating cultural & developmental factors

Early findings suggest that precision approaches may improve outcomes in youth who do not respond adequately to SSRIs alone (Pizzagalli, 2024).

School- and Community-Based Models

As adolescents spend most of their time in educational settings, school-based screening and mental-health literacy programs represent critical prevention strategies. Strengthening teacher training, peer-support networks, and referral pathways can facilitate early detection. Community-integrated programs, including religious and youth-centered organizations, may support early engagement and destigmatization.

Public Health and Policy Needs

Given the rising incidence of adolescent mental-health disorders globally and regionally, anhedonia should be recognized as a public-health priority. Policies promoting early detection, insurance coverage for mental-health services, integration of mental-health curricula into schools, and investment in youth psychiatry training are essential.

CONCLUSION

Anhedonia represents a core and highly impairing dimension of adolescent depression and anxiety, contributing to profound functional, academic, and developmental consequences. This case illustrates how anhedonia may manifest as withdrawal from meaningful activities, diminished motivation, and reduced engagement in social and academic settings — symptoms that are easily overlooked or misinterpreted in cultural contexts where emotional expression is discouraged and academic performance is highly prioritized.

Early recognition of anhedonia is essential, as it is strongly associated with poorer treatment response, increased chronicity, and heightened suicide risk. Routine screening of reward processing, alongside mood and anxiety symptoms, can support more accurate diagnosis and facilitate timely intervention. The

integration of structured instruments such as the Snaith–Hamilton Pleasure Scale (SHAPS) and culturally attuned interviews enhances clinical assessment and reduces the likelihood of underdiagnosis — particularly in collectivistic settings like Indonesia where somatic and behavioral presentations may predominate.

Management requires a comprehensive, multimodal approach that addresses both neurobiological and psychosocial dimensions, combining pharmacotherapy, behavioral activation, cognitive–behavioral strategies, family involvement, and school-based support. In cases where first-line SSRI treatment yields partial response, careful evaluation for adjunctive interventions targeting dopaminergic or glutamatergic mechanisms may be warranted, particularly in treatment-resistant presentations.

Ultimately, understanding anhedonia as both a neurobiological and culturally influenced phenomenon can strengthen clinical care and reduce stigma (Rybakowski, 2018). By recognizing anhedonia early, promoting culturally informed psychoeducation, and supporting adolescents across home, school, and community environments, clinicians and stakeholders can foster more effective recovery pathways. Continued research and intersectoral collaboration are needed to optimize prevention, detection, and intervention strategies, and to ensure adolescents regain not only emotional stability, but also the capacity for joy, purpose, and meaningful engagement in daily life.

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