

The Change of Diagnosis from Panic Disorder to Generalized Anxiety Disorder in the Elderly

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Abstract

Anxiety disorders are common in older adults and often present with evolving clinical patterns that complicate diagnosis and management. This study aims to describe the diagnostic transition from panic disorder to generalized anxiety disorder in an elderly patient through a narrative literature review integrated with a single-case illustration. The literature was identified from major academic databases and synthesized narratively, while the clinical case involved a 62-year-old male with a history of panic disorder whose symptoms gradually shifted into persistent and generalized anxiety over a seven-year period. Clinical evaluation was supported by the Depression Anxiety Stress Scale-21 and the World Health Organization Quality of Life-BREF. The findings indicate predominant generalized anxiety symptoms with moderate impairment in quality of life and no clinically significant depressive features, possibly related to sustained pharmacological management and cumulative psychosocial and medical stressors. This case illustrates that anxiety disorders in later life may evolve dynamically over time and highlights the importance of longitudinal assessment, careful diagnostic reconsideration, and integrated biopsychosocial management. Further studies using larger samples and objective biomarkers are needed to clarify the mechanisms underlying diagnostic evolution in geriatric populations.

KEYWORDS

elderly; panic disorder; generalized anxiety disorder; diagnostic evolution; mental health.

Introduction

Anxiety disorders are among the most common psychiatric conditions encountered in the elderly population. In geriatric patients, establishing an accurate diagnosis is often challenging due to atypical symptom presentations, overlap with chronic medical conditions, and psychosocial changes associated with aging. Panic disorder (PD) and generalized anxiety disorder (GAD) are recognized as two of the most prevalent forms of anxiety disorders in clinical practice.

While PD typically emerges during early adulthood, evidence suggests that in later life the clinical pattern frequently shifts toward GAD, which is chronic and diffuse in nature (Sami & Nilforooshan, 2015). Several studies have reported a substantial burden of anxiety symptoms in older adults, with GAD being one of the most persistent forms in this age group (Liu et al., 2023; Shafiee et al., 2024; Welzel et al., 2019).

As individuals age, the episodic and intense symptoms characteristic of PD may evolve into more enduring and generalized forms of anxiety, marked by pervasive and persistent worry about multiple aspects of daily life. Epidemiological data indicate that anxiety disorders are relatively common among the elderly, with an overall prevalence of approximately 14–17%. Within this spectrum, GAD is the most frequently observed subtype, whereas PD is comparatively rare in later life (Welzel et al., 2019). Moreover, GAD in older adults has been strongly associated with multiple medical comorbidities, including diabetes, cardiovascular disease, and other chronic conditions, contributing to greater distress, impaired physical functioning, and reduced quality of life irrespective of the underlying somatic illness (Andreescu & Varon, 2015; Wong et al., 2024).

The diagnostic trajectory of psychiatric disorders in the elderly is often dynamic, with evolving symptoms influenced by age-related factors and comorbid medical conditions.

Panic disorder in earlier stages may thus transition into persistent generalized anxiety, necessitating adjustments in diagnosis and therapeutic approach. The concept of neuro progression has also been increasingly recognized as a factor influencing the chronicity and evolution of anxiety disorders in later life. This case study illustrates such a diagnostic shift in an elderly patient, highlighting the clinical implications of the transition from PD to GAD.

Globally, the prevalence of anxiety disorders in the elderly varies across regions. A meta-analysis by [Shafiee et al. \(2024\)](#) reported that anxiety symptoms affect approximately 23.5% of older adults in middle-income countries, while in Southeast Asia the prevalence ranges from 15-20%. In Indonesia specifically, data from the Basic Health Research (Riskesdas) indicates an increase in mental-emotional disorders among the elderly from 6% to 9.8% over the past decade, although specific data for GAD and PD remain limited.

The impact of anxiety disorders in the elderly extends beyond individual suffering to affect healthcare systems and family economics. Older adults with GAD are reported to have healthcare costs 50-80% higher compared to those without anxiety disorders, primarily due to increased healthcare visits and unplanned hospitalizations ([Andreescu & Varon, 2015](#)). These economic and social burdens underscore the importance of accurate diagnosis and appropriate management of anxiety disorders in aging populations.

Methods

This study employed a narrative literature review integrated with a clinical case illustration to examine the diagnostic transition from panic disorder (PD) to generalized anxiety disorder (GAD) in an elderly patient. The case subject was a 62-year-old male who demonstrated a longitudinal trajectory from PD in earlier life stages to GAD in late adulthood.

A literature search was conducted using PubMed and Google Scholar to identify relevant studies on late-life anxiety disorders, diagnostic transition, and panic disorder. Keywords included "panic disorder," "generalized anxiety disorder," "elderly," "late-life anxiety," and "diagnostic transition." Articles published in English between 2010 and 2024 were considered. Peer-reviewed original articles, reviews, and case reports relevant to the study objectives were included.

Clinical evaluation was complemented by standardized psychometric instruments, including the Depression Anxiety Stress Scale-21 (DASS-21) and the World Health Organization Quality of Life Instrument-BREF (WHOQOL-BREF), to assess anxiety severity and quality of life domains. The Depression Anxiety Stress Scale-21 (DASS-21) is a 21-item self-report instrument designed to measure the negative emotional states of depression, anxiety, and stress ([World Health Organization, 2015](#)). Each of the three subscales contains seven items, scored on a 4-point Likert scale ranging from 0 (did not apply to me at all) to 3 (applied to me very much or most of the time). The WHOQOL-BREF comprises 26 items measuring four domains: physical health, psychological health, social relationships, and environment, with higher scores indicating better quality of life.

The patient provided written informed consent for participation in the clinical evaluation and publication of this case report.

Result and Discussion

Case Presentation

A 62-year-old male presented with persistent anxiety symptoms that had been ongoing since 2018. Initially, he

experienced recurrent episodic panic attacks characterized by palpitations, restlessness, and fear of losing control. Over time, these symptoms gradually shifted toward pervasive and chronic worry involving multiple domains, including health, occupation, and family, accompanied by sleep disturbance and difficulties in concentration.

The patient's psychosocial history revealed multiple significant stressors, including major financial loss related to legal problems, three marriages ending in the death of spouses, a history of divorce and infidelity, and strained relationships with his child.

His medical history included several chronic comorbidities, namely type 2 diabetes mellitus with nephropathy, atherosclerotic coronary artery disease, benign prostatic hyperplasia, and spondylosis. These conditions required long-term pharmacological treatment.

Psychiatric evaluation in 2018 resulted in a diagnosis of panic disorder and depression, for which he was treated with sertraline and alprazolam. Sertraline was initiated at 25 mg daily and gradually titrated to 50 mg daily over four weeks, which has been maintained consistently since then. Alprazolam 0.25 mg was prescribed on an as-needed basis (*pro re nata*) for acute panic attacks, with average use of 1-2 times per week during the first three months of treatment. The alprazolam was successfully tapered off and discontinued after six months, with no reported withdrawal symptoms. The patient has demonstrated good medication adherence throughout the treatment period, with no significant adverse effects reported. Following treatment, panic attacks decreased in frequency. However, the patient subsequently reported persistent and excessive worry consistent with generalized anxiety disorder.

Psychometric assessment using the Depression Anxiety Stress Scale-21 (DASS-21) demonstrated mild anxiety symptoms (score: 8), while depression (score: 7) and stress (score: 12) remained within normal ranges. These scores reflect the standard DASS-42 cut-off scores after multiplying the raw DASS-21 scores by two, as per the manual guidelines ([Lovibond & Lovibond, 1995](#)). Quality of life assessment using the World Health Organization Quality of Life Instrument-BREF (WHOQOL-BREF) indicated moderate impairment across all domains, with the lowest score observed in the social domain (41.6) ([World Health Organization, 1997](#)). Further analysis of WHOQOL-BREF domain scores revealed the following profile: physical health domain scored 45.8 (indicating impairment related to chronic medical conditions), psychological domain scored 47.2 (reflecting residual anxiety symptoms), social relationships domain scored 41.6 (the lowest score, consistent with reported loneliness and family conflict), and environmental domain scored 48.5 (relatively preserved, suggesting adequate access to healthcare and living conditions). These domain-specific impairments highlight the multidimensional impact of chronic anxiety on the patient's daily functioning.

Mood-Anxiety Spectrum Theory (Dimensional Approach)

The spectrum approach in psychopathology highlights that mood and anxiety disorders lie on a continuum of symptoms rather than rigid categories ([Kotov et al., 2017](#)). DSM-5 accommodates this perspective through dimensional assessment tools, such as the Generalized Anxiety Disorder Dimensional Scale (GAD-D), which demonstrates high reliability in assessing symptoms continuously ([Groves et al., 2023](#)). Within this framework, panic disorder (PD) is characterized by episodic yet intense anxiety, whereas generalized anxiety disorder (GAD) reflects persistent and chronic worry. Transitions from PD to GAD are common in older adults due to psychosocial stressors and chronic medical conditions ([Lenze & Wetherell, 2011](#)).

This pattern is evident in the present case, in which the patient initially presented with episodic panic attacks and later developed pervasive worries related to health, work, and family.

His DASS-21 scores indicated mild anxiety without significant stress or depression, consistent with a spectrum-based transition from panic to generalized anxiety. WHOQOL-BREF results showed moderate impairment in quality of life, particularly in the physical and social domains, underscoring the functional impact of chronic anxiety. These psychometric findings support the diagnosis of GAD and reinforce the spectrum perspective, which views anxiety symptoms as dynamic processes rather than static diagnostic entities (Beard et al., 2016; Kotov et al., 2017). The Hierarchical Taxonomy of Psychopathology (HiTOP) framework, proposed by Kotov et al. (2017), offers a dimensional alternative to traditional categorical diagnoses. Within this framework, both PD and GAD are conceptualized as manifestations of a broader internalizing spectrum, which also includes major depressive disorder. This dimensional perspective explains why patients often transition between diagnostic categories over time, as their symptom profiles shift in response to developmental stages, life stressors, and biological changes. The present case exemplifies this dimensional fluidity, with panic symptoms gradually giving way to generalized worry as the patient aged.

Medical Comorbidities and Psychosomatic Interactions

In Indonesia, individuals aged 60 years and above are classified as older adults according to national regulations and World Health Organization standards. This classification reflects the increased burden of chronic diseases and healthcare needs in this population. Anxiety disorders, particularly GAD, are frequently associated with chronic comorbidities such as diabetes mellitus, cardiovascular disease, urological disorders, and musculoskeletal conditions, all of which may exacerbate psychological distress (Sami & Nilforooshan, 2015).

In this case, the patient's history of diabetes mellitus, atherosclerotic heart disease, benign prostatic hyperplasia, and musculoskeletal problems was accompanied by persistent health-related worries. Previous studies have shown that chronic physical illnesses not only intensify anxiety symptoms but that anxiety itself may amplify the perception of physical discomfort and disability (Liu et al., 2023; Park & Kim, 2017). Such reciprocal interactions may contribute to the evolution of episodic panic symptoms into chronic generalized anxiety. The bidirectional relationship between anxiety and chronic medical conditions involves multiple physiological pathways. Chronic hyperglycemia in diabetes mellitus can directly affect brain function through microvascular changes and altered neurotransmitter metabolism, potentially lowering the threshold for anxiety symptoms. Conversely, sustained anxiety activates the sympathetic nervous system, leading to increased catecholamine release, which may exacerbate insulin resistance and cardiovascular strain. In patients with coronary artery disease, anxiety has been identified as an independent risk factor for adverse cardiac events, creating a vicious cycle of physical and psychological morbidity.

Psychosocial Factors

Psychosocial factors play a crucial role in the development and persistence of anxiety in older adults. Aging is often accompanied by retirement, reduced social participation, and bereavement, which may lead to loneliness and social isolation (National Academies of Sciences Engineering & Medicine, 2020). Low social engagement and limited emotional support have been consistently associated with increased anxiety symptoms (Liu et al., 2023; Santini et al., 2020). Community-based and family-oriented interventions have been shown to improve psychological well-being and quality of life in elderly populations (Donovan & Blazer,

2020; McHugh Power et al., 2019; Republik Indonesia, 1998; Taylor et al., 2018).

In the present case, severe occupational stress related to legal and financial difficulties, combined with family conflict and feelings of loneliness, contributed to sustained emotional burden. These psychosocial stressors broadened the scope of the patient's worries and facilitated the development of pervasive anxiety characteristic of GAD. The cumulative stress model posits that the total burden of life stressors, rather than any single event, predicts psychological outcomes in late life. In this patient, the accumulation of financial loss, multiple bereavements, marital dissolution, and family conflict over several decades created a sustained allostatic load that overwhelmed his coping resources. This chronic stress exposure likely sensitized his stress-response systems, making him more vulnerable to developing generalized anxiety even after the initial panic symptoms were pharmacologically controlled.

Neuroprogression and Pharmacological Response

Prolonged exposure to psychological stress has been associated with dysregulation of stress-response systems, including the hypothalamic-pituitary-adrenal axis, neuroinflammation, and neurotransmitter imbalance (Gaffey et al., 2016; Mikulska et al., 2021; Tafet, 2020). Since 2018, persistent worry, insomnia, and restlessness in this patient may have repeatedly activated these systems. The concept of neuroprogression, originally developed in the context of mood disorders, has gained traction in understanding the longitudinal course of anxiety disorders. Neuroprogression refers to the pathological brain changes associated with illness chronicity, including neuronal atrophy, reduced neuroplasticity, and persistent neuroinflammation. In anxiety disorders, repeated activation of the hypothalamic-pituitary-adrenal (HPA) axis leads to elevated cortisol levels, which over time can damage hippocampal neurons—a region critical for emotional regulation and stress response. This hippocampal atrophy has been documented in neuroimaging studies of patients with chronic GAD and may explain the cognitive complaints (e.g., 50% reduced concentration) reported by this patient.

Furthermore, chronic stress-induced inflammation involves the activation of microglia and increased production of pro-inflammatory cytokines such as interleukin-6 (IL-6) and tumor necrosis factor-alpha (TNF- α). These inflammatory mediators can cross the blood-brain barrier and influence neurotransmitter metabolism, particularly serotonin and dopamine, contributing to both mood and anxiety symptoms. The persistence of anxiety symptoms despite adequate pharmacotherapy in some elderly patients may reflect these underlying neuroprogressive changes, which are less responsive to conventional treatments. Although neurobiological markers were not directly assessed, ongoing cognitive complaints and mental fatigue may reflect the long-term effects of chronic stress.

Pharmacological management remains a cornerstone in the treatment of late-life anxiety disorders. Selective serotonin reuptake inhibitors and serotonin-norepinephrine reuptake inhibitors have demonstrated favorable efficacy and safety profiles in elderly patients (Anderson et al., 2024; Crocco et al., 2017; Sood et al., 2023). Conversely, benzodiazepines should be prescribed cautiously due to their association with cognitive impairment and fall risk (Conn et al., 2020; Subramanyam et al., 2018). In this case, long-term SSRI therapy was associated with emotional stability and the absence of clinically significant depressive symptoms.

Diagnostic Evolution and Overlap of GAD and PD

The diagnostic course of anxiety disorders in older adults is typically dynamic and influenced by age, psychosocial stressors, and medical comorbidities (Groves et al., 2023;

Sami & Nilforooshan, 2015; Schuurmans & van Balkom, 2011; Suradom et al., 2019). Panic disorder is more prevalent in younger individuals, whereas GAD predominates in later life and is closely linked to chronic illness and functional impairment (Liu et al., 2023).

Consistent with these findings, the patient initially experienced episodic panic symptoms and later developed generalized anxiety, insomnia, and persistent tension. This evolution explains the limited use of benzodiazepines and the reliance on SSRIs for long-term management. The present case highlights that PD and GAD in older adults should be viewed as part of an evolving clinical spectrum rather than fixed diagnostic categories.

Interpretation of Key Findings

This case demonstrates a diagnostic progression from panic disorder in midlife to generalized anxiety disorder in later life, accompanied by moderate impairment in quality of life and minimal depressive symptoms. Psychometric assessments using the DASS-21 and WHOQOL-BREF corroborated this diagnostic shift. The findings emphasize the role of cumulative psychosocial adversity and chronic medical comorbidity in shaping long-term anxiety trajectories and support the use of longitudinal frameworks in geriatric mental health assessment.

Comparison with Previous Studies

The clinical trajectory observed in this case is consistent with previous reviews and epidemiological studies indicating that anxiety disorders in older adults frequently progress toward more persistent forms (Liu et al., 2023; Sami & Nilforooshan, 2015; Welzel et al., 2019). While some studies emphasize the frequent coexistence of anxiety and depression (Schuurmans & van Balkom, 2011), this case illustrates that GAD may persist independently, highlighting the importance of accurate differential diagnosis and individualized management. Cross-cultural comparisons reveal interesting variations in anxiety presentation among elderly populations. While Western studies often emphasize worry about personal health and financial security, studies from Asian contexts, including Indonesia, highlight the role of family harmony and social cohesion as central concerns. The prominence of family-related worries in this patient's presentation—specifically conflict with his child and feelings of loneliness—aligns with these cultural patterns and underscores the need for culturally sensitive assessment and intervention in geriatric anxiety.

Limitations and Cautions

Several limitations should be acknowledged. The single-case design limits generalizability, and reliance on self-reported measures may introduce reporting bias. The absence of neurobiological and neuroimaging data restricts causal interpretations of neuroprogression mechanisms. In addition, the specific sociocultural context of Surabaya, Indonesia, may limit applicability to other populations.

Recommendations for Future Research

Future studies should employ longitudinal, multi-center, and cross-cultural designs incorporating biological, psychological, and social measures to clarify diagnostic transitions in elderly populations. The integration of pharmacological and psychosocial interventions, as well as mixed-method approaches, may further enhance understanding of the subjective experience and long-term course of anxiety disorders in later life.

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Conclusion

This case report illustrates the dynamic diagnostic evolution from panic disorder in midlife to generalized anxiety disorder in later life, highlighting the complex interaction between biological, medical, and psychosocial factors in elderly patients. The findings emphasize that anxiety disorders in older adults should be understood as progressive and multidimensional conditions rather than static diagnostic entities.

The integration of clinical evaluation, psychometric assessments, and literature-based analysis proved valuable in identifying symptom progression and guiding appropriate long-term management. Early recognition of diagnostic shifts, combined with individualized pharmacological and psychosocial interventions, is essential for improving functional outcomes and quality of life in geriatric populations.

The clinical implications of this diagnostic evolution are manifold. First, clinicians should maintain diagnostic flexibility when treating elderly patients with anxiety, recognizing that symptom patterns may shift over time and that initial diagnoses may require revision. Second, comprehensive assessment should include not only symptom severity but also functional status, quality of life, and social support systems. Third, treatment planning must integrate pharmacological and psychosocial approaches tailored to the patient's evolving needs. Finally, psychoeducation for patients and families about the dynamic nature of anxiety disorders can help set realistic expectations and improve treatment adherence.

This case underscores the importance of adopting a longitudinal and holistic approach in the assessment and treatment of anxiety disorders among older adults. Future studies employing larger samples and prospective designs are needed to further elucidate the mechanisms underlying diagnostic transitions and to optimize comprehensive care strategies for this vulnerable population.

Author contributions

E.A.N. was primarily responsible for the conceptualization of the research, conducting the literature review, collecting and analyzing the clinical data, and drafting the initial version of the manuscript. H.A. provided comprehensive scientific supervision, contributed to the interpretation of findings, and conducted substantial revisions to enhance the academic quality of the paper.

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