

GENERALIZED ANXIETY DISORDER: A COMPREHENSIVE REVIEW OF CURRENT DIAGNOSTIC AND THERAPEUTIC APPROACHES

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ABSTRACT

Generalized Anxiety Disorder (GAD) is a common, long-term mental health condition defined by excessive, uncontrollable worry and a range of associated symptoms, including muscle tension, fatigue, restlessness, irritability, and sleep disturbances. This review examines GAD's diagnostic criteria, pathophysiology, risk factors, treatment options, and prognosis. Neurobiological contributors to GAD include imbalances in neurotransmitters, such as serotonin, dopamine, and gamma-aminobutyric acid (GABA), which influence mood and stress response. Genetic predisposition and environmental stressors, such as trauma and chronic life stress, also play significant roles in GAD's development. Effective treatment often combines cognitive-behavioural therapy (CBT) with pharmacotherapy; selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs) are commonly used as first-line medications.

Benzodiazepines can provide short-term relief for severe symptoms, though they carry a risk of dependency. The prognosis for GAD is variable, with early diagnosis and consistent treatment adherence linked to more favourable outcomes. This review highlights the importance of a personalized approach to GAD treatment, considering individual patient profiles, symptom severity, and coexisting mental health conditions. Furthermore, it

underscores the need for continued research to advance our understanding of GAD's complex pathophysiology, identify new therapeutic targets, and improve quality of life for those affected by this debilitating disorder.

KEYWORDS: Generalized Anxiety Disorder, cognitive-behavioural therapy, SSRIs, personalized treatment, prognosis.

INTRODUCTION

Generalized Anxiety Disorder (GAD) is characterized by excessive and uncontrollable worry about everyday situations. It is a chronic condition associated with significant somatic symptoms, high rates of comorbidity with depression and other anxiety disorders, and considerable disability.^[1] However, patients with GAD seldom report anxiety symptoms directly, making it difficult to identify them.^[2,3] Research in primary care indicates that general practitioners accurately recognize only about one-third of cases.^[2,4] Nonetheless, GAD considerably affects the quality of life and functioning of those affected and imposes substantial economic costs on society.^[5,6]

The concept of GAD evolved from earlier ideas like 'neurasthenia' and 'anxiety neurosis,' which emerged in the late 19th and early 20th centuries.^[7] GAD was first identified and differentiated from panic disorder (PD) in the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III) in 1980.^[8] It was subsequently recognized as a distinct anxiety disorder in the 10th edition of the International Classification of Diseases (ICD-10) in 1994.^[9] Both the 2013 DSM-5^[10] and the 2022 ICD-11^[11] continue to acknowledge GAD as a distinct diagnosis.^[12]

EPIDEMIOLOGY

Generalized Anxiety Disorder (GAD) is reported to be either the most common or the second most common anxiety disorder among older adults, following phobias.^[13] Epidemiological surveys that utilize diagnostic interviews have indicated a wide range of period prevalence rates for GAD in community-dwelling older adults, from 0.7% to 9%.^[14] The estimated lifetime prevalence of GAD is approximately 5.7%. For individuals under 65 years of age, the 12-month prevalence is about 1.7%, while for those aged 65 and older, it increases to approximately 3.4%.^[15]

Notably, the highest prevalence rates are often observed in the 45 to 55 age group, with women being twice as likely to be affected as men. Among the elderly, one study identified GAD as the most prevalent anxiety disorder, with a prevalence of 10.2%.^[1] In the UK, research found that although 3% of the general population met the screening criteria for GAD, only 8% of those identified had received a formal diagnosis and were actively undergoing treatment.^[16] Further estimates suggest that GAD is accurately identified and diagnosed in roughly 34% of patients within primary care settings.^[17] Additionally, the physical symptoms associated with GAD may often have legitimate medical explanations, as the disorder is linked to an increased prevalence of conditions such as migraine headaches, gastrointestinal diseases, allergic reactions, respiratory disorders, and other chronic illnesses.^[15]

COMORBIDITY AND RISK FACTORS

Major depression is a prevalent comorbid condition that can be challenging to differentiate from generalized anxiety disorder (GAD), as many symptoms—such as fatigue and insomnia—overlap between the two. Individuals with GAD face an increased risk of self-harm, including suicide attempts.^[18] Routine assessment for comorbid anxiety and depressive disorders is essential, as this comorbidity can exacerbate illness severity, functional impairment, and economic costs. Moreover, the likelihood of developing additional medical conditions is heightened in those with GAD, encompassing pain syndromes, hypertension, and cardiovascular and gastrointestinal issues. While medical comorbidities are linked to more severe anxiety symptoms and related disability, the effectiveness of anxiety interventions generally remains unaffected by the presence of multiple medical conditions, except in migraine sufferers, who tend to show less improvement over the long term.^[19]

Patients with GAD are also at greater risk for various mental and physical health issues, including chronic pain syndromes, asthma, chronic obstructive pulmonary disease, and inflammatory bowel disease.^[20] Approximately 35% of individuals with GAD resort to self-medicating with alcohol and drugs to alleviate their anxiety symptoms, a behaviour that contributes to a higher risk of substance use problems. Given the high prevalence of coexisting conditions, managing GAD requires careful attention to a potentially complex interplay of psychological and physical symptoms.^[21] Established risk factors for GAD include female sex, low socioeconomic status, and exposure to childhood adversity, such as

physical or sexual abuse, neglect, and parental issues involving intimate partner violence, alcoholism, or drug use.^[22,23]

CLINICAL FEATURES

The criteria for diagnosing Generalized Anxiety Disorder (GAD) have evolved over time. Historically, the diagnosis has included persistent excessive anxiety and a combination of various psychological and somatic complaints. In the World Health Organization's International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10), at least one symptom of autonomic arousal—such as palpitations, sweating, trembling, or dry mouth—is required, along with up to three additional symptoms. For a DSM-IV diagnosis, three out of several symptoms must be present, including restlessness, fatigue, difficulty concentrating, irritability, sleep disturbances, and muscle tension. The DSM-IV also includes worry over minor issues, a criterion not found in the ICD-10. This adjustment allows for diagnosis regardless of symptom overlap, helping to distinguish GAD from other anxiety-related disorders such as hypochondriasis (health anxiety), panic disorder, somatization disorder, obsessive-compulsive disorder, social anxiety disorder, and eating disorders. Additionally, anxiety is frequently associated with substance misuse disorders, including alcohol use, which must also be considered.^[24]

Since no single symptom is exclusive to GAD, it is essential to rule out other anxiety disorders before making a diagnosis. This process can be complicated, particularly when a patient presents with multiple disorders. Accurate differentiation is necessary for establishing two diagnoses. When the DSM-III was introduced in 1980, the symptom duration required for diagnosing GAD was set at one month, with a diagnostic hierarchy that excluded GAD if depressive, phobic, or panic disorders were present. This hierarchy was soon deemed inappropriate, as co-occurring disorders were often the norm rather than the exception. However, the hierarchy still applied if GAD symptoms were present only during a mood disorder. Research has indicated that this hierarchical approach does not adequately represent all patients, as those with both anxiety and depressive symptoms experience greater morbidity than those with mood disorders alone.^[24]

Subsequent editions of the DSM and ICD increased the symptom duration required for a GAD diagnosis from one month to six months, recognizing it as a chronic condition. However, studies suggest little difference in patient outcomes between those whose

symptoms last one to six months and those who meet the diagnostic criteria after six months.^[24]

Table 1: Comparison of Diagnostic Criteria for Generalized Anxiety Disorder (GAD) in ICD-10 and DSM-IV Systems.

Criteria	ICD-10	DSM-IV
Primary Symptom	Significant tension, worry, and feelings of apprehension about daily events and issues	Excessive anxiety and worry (apprehensive expectation) about various events or activities
Additional Key Feature	--	Difficulty managing the worry
Symptom Duration	Minimum of 6 months	Minimum of 6 months
Required Symptoms for Diagnosis	At least four symptoms, with at least one autonomic arousal symptom	At least three symptoms
Specific Symptoms		
Autonomic Arousal	Palpitations, sweating, trembling, dry mouth	--
Chest and Abdomen	Breathing difficulties, choking sensation, chest pain, nausea	--
Mental State	Dizziness, feelings of unreality (depersonalization or depression), fear of losing control, fear of dying	Trouble concentrating or mind going blank
General	Hot or cold flushes, numbness or tingling, muscle tension or aches, restlessness, inability to relax, feeling of a lump in throat (difficulty swallowing)	Restlessness, feeling on edge, fatigue, irritability, muscle tension
Sleep Disturbance	--	Difficulty falling or staying asleep, restless or unsatisfying sleep
Impact on Social Functioning	Not addressed	Significant distress or impairment in social, work, or other important areas
Exclusion Criteria for Overlapping Symptoms	Not meeting criteria for panic disorder, phobic anxiety disorder, obsessive-compulsive disorder, or hypochondriasis	Worry is not solely focused on features of related disorders such as panic disorder, OCD, separation anxiety, or PTSD
Additional Exclusion Criteria	Symptoms are not due to a physical condition like hyperthyroidism, organic mental disorder, or substance-related issues (e.g., benzodiazepine withdrawal)	Symptoms are not due to physiological effects of a substance, medication, or physical condition (e.g., hyperthyroidism) and don't occur solely during mood, psychotic, or pervasive developmental disorders

ASSESSMENT

Patients with generalized anxiety disorder typically respond affirmatively to the question, “Do you worry excessively about minor matters?” This inquiry is particularly relevant for individuals experiencing insomnia, depressive symptoms, chronic gastrointestinal issues, or other unexplained recurrent health problems. Brief screening tools, such as the Generalized Anxiety Disorder 7-Item (GAD-7) Questionnaire, can be utilized to assess the disorder and monitor outcomes over time, as they require only a few minutes to complete. Nonetheless, the recommendation for routine screening for generalized anxiety disorder remains a topic of debate.^[23]

Over the past two weeks, how frequently have you experienced the following issues? (Mark “✓” to indicate your response)	Not at All	Several Days	More than Half the Days	Nearly Every Day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Unable to stop or control worrying	0	1	2	3
3. Worrying excessively about various things	0	1	2	3
4. Finding it hard to relax	0	1	2	3
5. Feeling so restless that it’s difficult to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as though something terrible might happen	0	1	2	3

Figure 1: Generalized Anxiety Disorder 7-Item Questionnaire.

Scoring (0 to 21): Add up individual item scores.

- **5-9 points:** Mild, likely subclinical anxiety; monitoring recommended.
- **10-14 points:** Moderate, possibly clinically significant anxiety; further assessment and treatment (if needed) advised.
- **15-21 points:** Severe, likely clinically significant anxiety; treatment is likely warranted.^[23]

MANAGEMENT

Randomized controlled trials offer robust evidence supporting the effectiveness of specific pharmacotherapy, psychotherapy, or a combination of both for treating generalized anxiety disorder.^[23] Pharmacological therapy is usually the first-line treatment due to its lower resource demands and the greater effect sizes observed for pharmacological options compared to psychological ones.^[15,25] The choice of initial treatment should primarily reflect patient preference, with most patients favouring psychotherapy.^[23,26]

COGNITIVE BEHAVIOUR THERAPY

- Cognitive Behavioural Therapy (CBT) is the most extensively researched psychological treatment for Generalized Anxiety Disorder (GAD).^[27] CBT for GAD typically involves several core components: educating the patient about GAD, using breathing exercises and progressive muscle relaxation to manage physical symptoms, applying cognitive restructuring to address unhelpful worry patterns, and practicing graded exposure, either real or imagined, to help patients develop coping skills in anxiety-provoking situations.^[14]
- CBT can be delivered through various methods, including weekly individual sessions (60 minutes each, over 12 to 16 weeks), weekly group sessions (8 to 12 sessions), computer-assisted therapy with minimal therapist support in primary care settings, and telephone-based therapy for rural populations.^[28] These delivery methods have been tested and shown to be effective, producing moderate-to-large effect sizes compared to control groups (such as those on a waiting list).^[23,29]
- CBT is generally structured in stages and includes components such as education about the condition, arousal management, graded exposure, inhibiting safety responses, letting go of safety signals, and implementing cognitive strategies.^[19]
- CBT can be delivered in several formats: face-to-face (either individually or in groups), digitally via computer, tablet, or smartphone applications (digital CBT or dCBT), or through self-guided CBT resources such as self-help books.^[19]
- Effective face-to-face CBT requires significant therapist training and expertise. If CBT is poorly executed or inadequately paced, it may be ineffective or emotionally challenging, potentially leading to treatment dropout and negative perceptions of future CBT trials. Additionally, cost and access often pose challenges for patients.^[19]
- CBT has a dropout rate comparable to that of antidepressant treatment. However, evidence indicates that CBT, whether delivered face-to-face by a skilled clinician or as guided digital CBT, typically results in no serious adverse effects.^[19]

PHARMACOTHERAPY

Pharmacologic treatment for generalized anxiety disorder (GAD) helps reduce symptoms and disability, leading to improved health-related quality of life.^[20] Research has shown that several medications are more effective than placebo for treating GAD.^[14] Most antidepressants, certain benzodiazepines, buspirone, and pregabalin have demonstrated efficacy in managing GAD symptoms.^[31]

ANTIDEPRESSANTS

- Antidepressants may take up to 4 weeks to show full effectiveness, although noticeable clinical improvement can sometimes be observed within just 2 weeks.^[24]
- Selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs) are typically regarded as first-line pharmacologic treatments for generalized anxiety disorder, with response rates ranging from 30% to 50%.^[32,33]
- SSRIs prescribed for DSM-IV diagnosed GAD include escitalopram, paroxetine-immediate release, and sertraline. Among these, sertraline is generally considered the best option for women of reproductive age, due to the extensive safety data available on its use during pregnancy and lactation.^[1]
- When SSRIs and SNRIs are prescribed for generalized anxiety disorder, they are typically given at the same doses as those used for treating major depression. The expected time to response is also similar, usually ranging from 4 to 6 weeks, along with the same precautions and anticipated side effects.^[34]
- Tricyclic antidepressants like imipramine are as effective as SSRIs, but they tend to have a less favourable safety profile. Their role in the treatment of generalized anxiety disorder remains uncertain; however, they may be beneficial for individuals who have previously responded to them and could be an option for patients who do not respond to SSRIs or SNRIs.^[23]
- The selection of treatment is based more on the variety of side effects than on the superiority of anxiolytic effects. For instance, if insomnia and restlessness are prominent symptoms, it may be more appropriate to opt for a tricyclic antidepressant with sedative properties, such as amitriptyline or trimipramine, rather than an SSRI or SNRI, as the latter can sometimes exacerbate anxiety and restlessness during the initial treatment phase.^[24]
- The range of side effects associated with SSRIs (such as nausea, dizziness, and anorexia) is generally regarded as less severe than those of tricyclic antidepressants (which can include dry mouth, sedation, postural hypotension, and difficulty urinating). As a result, SSRIs, like escitalopram or paroxetine, are typically recommended as the first-line treatment.^[24]
- Sertraline has the highest acceptance, risk-to-benefit ratio, and cost-effectiveness profile among pharmacological treatments for GAD (National Institute for Health and Care

Excellence, 2011a). Consequently, it is recommended as the first-line therapy of choice, although the decision remains a topic of debate.^[19]

- Although the SNRI venlafaxine is effective, it is often recommended only as a second-line treatment due to concerns about its tolerability.^[24]
- Antidepressant side effects are a greater concern in older adults. For instance, one study found that frail elderly individuals experienced intolerance to venlafaxine extended-release, and older patients are also at a higher risk of developing hyponatremia when using SSRIs.^[1]

BENZODIAZEPINES

- Benzodiazepines can take effect within 15 to 60 minutes. However, they carry a risk of dependence with long-term use and are more likely to result in requests for extended prescriptions compared to antidepressants, although withdrawal effects can occasionally occur with antidepressants as well.^[35]
- Concerns about the potential for benzodiazepines to cause dependence have resulted in recommendations to avoid their long-term use.^[24]
- The initial treatment approach should likely involve a combination of benzodiazepines and an antidepressant, with the benzodiazepine dose tapered off after 2 to 3 weeks once the antidepressant starts to take effect. This treatment method is now common in clinical practice and is frequently recommended.^[36]
- There are several risks associated with benzodiazepine use in older adults, including cognitive impairment, psychomotor dysfunction, excessive daytime sedation, gait instability, falls, and hip fractures.^[14]
- Once anxiety symptoms have improved, efforts should be made to gradually taper off the benzodiazepine, typically over several weeks. While it is ideal to use an adjunctive benzodiazepine for only a short duration (no more than a few weeks), some patients may not achieve sufficient relief from anxiety symptoms with antidepressant medication alone. In such cases, longer-term use of an adjunctive benzodiazepine may be required.^[14]
- However, many specialists believe that benzodiazepines can be a reasonable option for selected patients—specifically those without current or past issues related to alcohol or other substance use—when preferred treatments are ineffective or have an undesirable side-effect profile, provided that close monitoring is maintained.^[32,37]

- Benzodiazepines should not be used in conjunction with opioid medications due to the potential for drug interactions. Additionally, their use in the elderly should be minimized, as the risks—such as falls—are likely to outweigh the benefits.^[23]
- Benzodiazepines are relatively ineffective in addressing cognitive anxiety symptoms and do not effectively treat depression. They are also linked to a range of adverse effects, including an increased risk of falls, cognitive impairment, impaired driving, and physical dependence with withdrawal. For these reasons, benzodiazepines are not recommended for the treatment of generalized anxiety disorder in primary or secondary care settings.^[19]
- The primary and/or adjunctive use of benzodiazepines is generally not recommended for treating generalized anxiety disorder during pregnancy. Earlier studies involving diazepam and chlordiazepoxide indicated a higher incidence of cleft lip associated with their use.^[1]
- Likewise, benzodiazepines are considered "contraindicated" during breastfeeding, according to the American Academy of Paediatrics Committee on Medications in Breastfeeding report from 2002. If benzodiazepines are necessary during pregnancy and/or lactation, the preferred options would be clonazepam and lorazepam.^[1]
- Clonazepam has a more favourable pregnancy rating (category C) compared to other benzodiazepines. Similarly, lorazepam offers several advantages, including multiple routes of administration, a history of use in children with status epilepticus, and a metabolic pathway that does not rely on the fetal or neonatal liver.^[1]

OTHER DRUGS

1. BUSPIRONE

- Buspirone, a partial agonist of serotonin 5-HT_{1A} receptors^[14], is an anxiolytic medication that may be beneficial for the long-term treatment of generalized anxiety disorder due to its non-addictive properties. It is believed to be particularly helpful for patients with alcohol dependence, although there is limited supporting evidence for this use.^[24]
- Buspirone may take up to 72 hours to take effect, and its onset of action is often accompanied by mild dysphoria.^[38]
- While buspirone is an effective treatment for generalized anxiety disorder, its role in managing anxiety in late life is limited.^[14]
- Due to its delayed onset of action, buspirone is not suitable as an acute adjunctive treatment for generalized anxiety symptoms associated with major depression.^[14]

- Buspirone may have reduced efficacy in individuals who have previously been treated with benzodiazepines.^[14]
- In patients with ICD-10 diagnosed mild symptoms of generalized anxiety disorder (GAD) of short duration and who have not been exposed to benzodiazepines, buspirone may serve as an initial pharmacotherapy option. However, due to its slow onset of action, variable tolerability, limited benefits for other comorbid disorders (except possibly for alcohol use disorder), and its lack of efficacy in recent benzodiazepine users—though findings on this are not entirely consistent—we generally do not recommend buspirone as a first-line treatment for DSM-IV GAD.^[1]
- The dosing schedule for buspirone, which requires administration twice to three times daily, may increase the risk of poor adherence to the medication.^[14]
- Unlike benzodiazepines, buspirone does not cause sedation, psychomotor impairment, cognitive impairment, or depressed respiratory drive.^[39] Therefore, it may be preferred over benzodiazepines for the ongoing management of generalized anxiety in non-depressed patients who have chronic obstructive pulmonary disease, sleep apnea, or neurological disorders.^[14]
- The primary adverse effects of buspirone include dizziness, headache, and nausea. To minimize the risk of these side effects, gradual dose titration is essential.^[14]

2. PREGABALIN

- Pregabalin, a gamma-aminobutyric acid (GABA) analogue, has been shown to be more effective than a placebo in patients with generalized anxiety disorder (GAD) in clinical trials.
- It may also help alleviate depressive symptoms.
- The therapeutic effect on somatic symptoms increases up to the maximum dose of 400–600 mg/day.
- However, dropout rates are high due to common side effects, including somnolence, dizziness, headache, and dry mouth, which can be particularly problematic for the elderly.^[19]

3. QUETIAPINE

- Quetiapine, an atypical antipsychotic, is moderately effective in treating generalized anxiety disorder (GAD).^[23]

- When prescribing quetiapine or other atypical antipsychotics, it is essential to consider the potential metabolic side effects associated with this drug class and to closely monitor the patient's weight, lipid levels, and glycated haemoglobin levels.^[23]
- The risk of discontinuation due to adverse events during treatment with quetiapine (extended-release formulation) seems to be related to both dosage and diagnosis.^[19]
- Patients with GAD are more likely to experience adverse effects when taking 300 mg per day of quetiapine extended release compared to those with other diagnoses.^[19]
- The benefits of quetiapine must be weighed against the risk of metabolic syndrome (weight gain), prolonged QTc syndrome, and a high dropout rate due to side effects (such as sedation and extrapyramidal symptoms). Therefore, it is not recommended for patients with GAD until more rigorous studies on its long-term safety and efficacy are conducted.^[19]

4. HYDROXYZINE

- The antihistamine hydroxyzine has shown effectiveness that surpasses placebo and is comparable to benzodiazepines and buspirone in treating generalized anxiety disorder (GAD).^[19]
- Although limited data indicate that antihistamines like hydroxyzine may be effective for GAD, they are not recommended due to their sedative properties and the lack of long-term data supporting their use.^[23]
- Hydroxyzine, an H1 antihistamine, has proven effective in studies lasting up to 12 weeks in patients diagnosed with DSM-IV GAD.^[40]
- In some countries, hydroxyzine is commonly used as an anxiolytic, particularly by primary care physicians. However, it is recommended as a second-line agent due to its side effect profile and limited efficacy for comorbid disorders.^[1]

5. PROPRANOLOL

- β -blockers, such as propranolol, are commonly used for anxiety in primary care settings^[41]; however, their efficacy in generalized anxiety disorder (GAD) remains unproven.^[42]
- Earlier studies conducted before GAD was clearly defined indicated some benefit for patients experiencing significant somatic manifestations of anxiety, which appeared to be mediated through β -adrenergic receptors.^[43]

- Some evidence suggests that combining propranolol with a benzodiazepine may be more effective than using a benzodiazepine alone for GAD, and this combination could assist with the subsequent withdrawal from the benzodiazepine.^[44]

Table 2: Medications for Generalized Anxiety Disorder: Dosage and Side Effects.

Medication	Starting Dose (mg/day)	Target Dose* (mg/day)	Common Side Effects	Comments
SSRI			Nausea, drowsiness, insomnia, jitteriness, diarrhoea, sexual dysfunction	
Sertraline	25	100–200		
Paroxetine†	10	20–60		
Paroxetine CR	12.5	25–75		Should not exceed 40 mg/day due to QT interval concerns
Citalopram	10	20–40		
Escitalopram†	5	10–20		
SNRI			Nausea, drowsiness, insomnia, dizziness, sexual dysfunction, hypertension	
Venlafaxine XR‡	37.5	75–225		
Duloxetine†	20	20–60		
Benzodiazepine			Drowsiness, dizziness	Caution in elderly or patients with current/past substance use; can be used alone or with SSRI or SNRI
Diazepam	2.5–5.0	10–40		Usually given in two divided doses
Clonazepam	0.25–0.50	1.0–2.0		Can be taken once daily or in two divided doses
Lorazepam	0.5–1.0	1.0–4.0		Usually given in two divided doses
Alprazolam	1.0–2.0	2.0–6.0		Usually given in three divided doses
Tricyclic Antidepressant			Orthostasis, cardiac arrhythmias, weight gain; potentially lethal in overdose	
Imipramine	10	50–200		
Other Medication				Can be used alone or as an adjunct to SSRI or SNRI
Buspirone‡	10–20	20–60	Dizziness, sweating,	

			nausea, insomnia	
Pregabalin	150	150–600	Drowsiness, dizziness	Usually given in two or three divided doses
Gabapentin	100–200	100–1800	Drowsiness, dizziness	Usually given in two or three divided doses
Quetiapine	25	50–200	Drowsiness, dizziness, weight gain, metabolic side effects	

*In older adults, target doses may be at the lower end of the range.

‡ FDA-approved for generalized anxiety disorder.

Note: This table is not exhaustive. "CR" denotes controlled release, and "XR" denotes extended release.^[23]

PREVENTION

- Evidence supporting the effective prevention of generalized anxiety disorder (GAD) is limited, primarily coming from studies focused on tertiary prevention in individuals already diagnosed with the disorder.^[24]
- The relationship between personality traits and GAD is established early in life, with Akiskal and colleagues^[46,47] suggesting that the disorder may be best viewed as an anxious temperament.^[24]
- It's important to understand that alleviating anxiety should not merely be seen as symptom relief. Many patients with GAD are able to function well, often even better than those with other mood and related disorders,^[48] and intervention is warranted only when symptoms disrupt normal social functioning.^[24]
- With the rise of self-help resources available online and community group psychoeducational interventions for anxiety and depression,^[49] individuals are likely to access support earlier, which could prove more beneficial.^[24]
- Research indicates that anxiety, both as a personality trait and a clinical issue, tends to become more pronounced with age, making any preventive interventions particularly valuable.^[24]
- All patients should receive education about anxiety, particularly its adaptive aspects; for instance, increased alertness and anxiety can enhance problem-solving, while severe anxiety can hinder it and lead to debilitating effects (as illustrated by the Yerkes-Dodson curve). This information can be extremely helpful, as individuals often feel that their experiences are frightening and unique to them.^[19]

- Encouraging patients to actively monitor their symptoms helps them recognize the triggers of their anxiety, as well as their typical responses, including thoughts and feelings, and the coping strategies they employ (such as escape, avoidance, reassurance-seeking, or the use of medications, substances, or over-the-counter products).^[19]

CONCLUSION

Generalized anxiety disorder (GAD) is prevalent and presents in various forms, often overlapping with other personality disorders. It has significant genetic and environmental influences and typically becomes apparent in early adulthood. Most treatment options demonstrate similar effectiveness, although much of the supporting evidence derives from studies examining single treatments rather than combinations. Patients should be informed that responses to both pharmacological and psychological therapies may not be immediate, that symptoms can occasionally worsen temporarily during treatment, and that long-term management may be necessary to sustain initial improvements. GAD should be viewed as a risk factor for the emergence of various other disorders, including related conditions like depression and secondary issues such as alcohol or benzodiazepine dependence.^[24] It is essential to identify potential barriers to treatment and develop a plan to address them.^[19]

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