Generalized anxiety disorder in adults: Cognitive-behavioral therapy and other psychotherapies

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INTRODUCTION

Generalized anxiety disorder (GAD) is characterized by excessive worry and anxiety that are difficult to control, cause significant distress and impairment, and occur on more days than not for at least six months [1].

GAD is a relatively common disorder, most often with an adult onset and chronic course [2-5]. GAD can lead to significant impairments in role functioning, diminished quality of life, and high health care costs [6,7]. The disorder can be effectively treated with psychotherapy, medication, or a combination of the two modalities.

This topic addresses the administration of cognitive-behavioral therapy (CBT) for GAD, including its components and method of administration. Other psychotherapies for GAD are discussed as well. The epidemiology, pathogenesis, clinical manifestations, course, diagnosis, and pharmacologic management of GAD in adults, children, and adolescents are discussed elsewhere.

- (See "Generalized anxiety disorder in adults: Management".)
- (See "Generalized anxiety disorder in adults: Epidemiology, pathogenesis, clinical manifestations, course, assessment, and diagnosis".)
- (See "Anxiety disorders in children and adolescents: Epidemiology, pathogenesis, clinical manifestations, and course".)
- (See "Anxiety disorders in children and adolescents: Assessment and diagnosis".)

- (See "Psychotherapy for anxiety disorders in children and adolescents".)
- (See "Pharmacotherapy for anxiety disorders in children and adolescents".)

CHOOSING INITIAL TREATMENT FOR GAD

For individuals with generalized anxiety disorder (GAD) who warrant treatment, the choice of treatment is individualized and one of shared decision making. Some individuals have a strong preference for one treatment over another. Specifically, some patients may be concerned about the side effects of medications and prefer to try cognitive-behavioral therapy (CBT) first; other patients may be concerned about the availability or time commitment required for therapy and thus opt for medications [8]. In our clinical experience, some patients with GAD (eg, individuals with GAD and comorbid depressive symptoms) may be too symptomatic to fully engage and participate in CBT. In these cases, we prefer initial treatment with pharmacotherapy. Although the combination of pharmacotherapy and CBT may be more beneficial than either alone, we find that most patients benefit from one or the other and typically reserve adding a second modality if symptoms persist. Our approach to selecting among treatments for GAD is discussed elsewhere. (See "Generalized anxiety disorder in adults: Management", section on 'Initial management decisions'.)

CBT AS FIRST-LINE PSYCHOTHERAPY

In individuals who are treated with psychotherapy for generalized anxiety disorder (GAD), our first choice is cognitive-behavioral therapy (CBT). CBT is an effective treatment for GAD that uses reasoning exercises or real experiences to facilitate symptom reduction and improve functioning. CBT generally appears to have comparable effectiveness in GAD across gender and socioeconomic status [9].

Meta-analyses and clinical trials support the efficacy of CBT in the treatment of GAD when compared with no treatment, with response rates persisting for several months. These data are discussed in detail elsewhere. (See "Generalized anxiety disorder in adults: Management", section on 'Choosing between medication and CBT'.)

CBT appears to be more effective than other psychosocial interventions in the treatment of GAD [10-12]. As examples:

- In a meta-analysis of psychotherapies for the treatment of GAD, CBT was the only psychotherapy (including CBT, third-wave CBT [ie, acceptance-commitment therapy],

relaxation therapy), associated with greater effect than treatment as usual at 3 to 12 months postintervention [10].

- In a randomized trial, 226 adults with GAD were assigned to 12-weeks of either CBT, stress education (control) or Kundalini yoga. Treatment with CBT, as compared with control, led to greater improvements on six of seven measures of symptom severity (eg, Clinical Global Impression-Severity, Penn State Worry Questionnaire, Beck Anxiety Inventory) at treatment end. Furthermore, at six-month follow-up, individuals treated with CBT, as compared with control, showed greater effect on some measures of symptom severity including Penn State Worry Questionnaire and the State-Trait Anxiety Inventory). Treatment with Kundalini yoga also led to greater improvement than control on three out of seven measures of symptom severity at treatment end but not at six-month follow-up [12].

Clinical trials of psychotherapies for GAD other than CBT have not shown sufficient evidence of efficacy to recommend their use, although evidence is accruing for mindfulness- and acceptance-based approaches. (See 'Limited role of other psychotherapies' below.)

ADMINISTERING COGNITIVE-BEHAVIORAL THERAPY

Number and length of sessions — Cognitive-behavioral therapy (CBT) for generalized anxiety disorder (GAD) is generally provided in 10- to 15-hour-long sessions but can include additional sessions depending on the severity of symptoms, the presence of comorbidity, patient resistance to the treatment approach, therapist competence, and the number of components incorporated into CBT.

Once the course of CBT has been successfully completed, patients are usually encouraged to check in with themselves on a weekly basis to monitor their symptoms and use CBT skills as a form of relapse prevention. (See 'Relapse prevention' below.)

There is some evidence that booster sessions (monthly) following CBT for anxiety disorders is associated with greater maintenance of therapeutic benefits [13], although this has not been specifically studied in the context of GAD.

Modifications to CBT components and course for patients with suboptimal response are discussed below. (See 'Addressing suboptimal response and relapse' below.)

Method of delivery — CBT is typically delivered by a therapist with training in CBT administration. The sessions are typically weekly or biweekly individual meetings with

homework assignments. The format of CBT often follows a manual that is used as a guide and for patient education [14,15].

Other methods of administering CBT have been developed for specific circumstances. For example, group sessions can be helpful for older adults to encourage socialization and offer the opportunity for self-disclosure. Other modifications have also been made (eg, in individuals who are unable to access traditional sessions). These are reasonable alternatives to individual sessions. Examples include:

- **Computer-based CBT** – CBT can be effectively administered as a computer-based therapy. As examples:

  - In a meta-analysis investigated 37 randomized trials of internet-based delivery of CBT for anxiety disorders [16], computer-based CBT as compared with wait list control, improved outcomes including clinically important disorder-specific anxiety symptoms (standardized mean difference -0.80, 95% CI -1.19 to -0.42).

  - In a meta-analysis of 26 trials that compared internet CBT with therapist-delivered CBT, equivalent effect sizes (mean difference -2.35 versus -2.79) were found. [17]

  Other studies and a meta-analysis investigating the efficacy of computer assisted CBT have also found greater efficacy than usual care, and similar efficacy to videoconference or telephone-delivered CBT [18-21].

- **Telephone-delivered CBT** – Telephone-delivered CBT is a type of CBT that has been adapted for administration to individuals living in rural areas to overcome accessibility barriers. In one trial, 141 adults (age >60 years) with GAD were randomly assigned to 9 to 11 telephone-delivered CBT sessions versus 10 sessions of nondirected supportive therapy (NST) [22]. Subjects in both groups showed a decline in anxiety symptoms (measured by the Hamilton Anxiety scale), depressive symptoms (measured by the Beck Depression Inventory), and worry (measured by the Penn State Worry Questionnaire). However, at four-month follow-up, those in the CBT group showed greater decline in worry as compared with those in the NST group (difference in improvement on the 40-point Penn State Worry Questionnaire: -4.1, 95% CI -6.3 to -1.9). There were also greater improvements at four months in depressive symptoms and GAD symptoms in the CBT group as compared with the NST group.

  Videoconference delivery of CBT over 15 weekly sessions, has been shown to be as effective at posttreatment and 6- and 12-month follow-up as in-person delivery on measures of GAD severity, worry, anxiety, intolerance of uncertainty, and tertiary measures of daily functioning [23].

Symptom assessment — An in-depth, structured interview is the first step in establishing diagnostic features and details of associated behaviors (eg, decision-making difficulties) in preparation for psychotherapy. Standardized questionnaires can be used to collect data on the domains of worry as well as physical symptoms associated with GAD. Such information is particularly helpful for tailoring treatment. As an example, details about the domains of worry will inform the content of cognitive restructuring. (See 'Targeting specific thoughts and behaviors' below.)

Such questionnaires include the following:

- Penn State Worry Questionnaire [24] measures the excessiveness and uncontrollable nature of worry.
- Worry Domains Questionnaire [25] assesses the amount of worry across five domains of everyday concern: relationships, lack of confidence, aimless future, work, and financial issues.
- Metacognitions Questionnaire [26,27] measures individual differences in a selection of metacognitive beliefs, judgments, and monitoring tendencies that are important in the metacognitive model of psychological disorders. These include positive beliefs about worry, negative beliefs about controllability of thoughts, cognitive confidence, and negative beliefs about thoughts in general (ie, superstition, punishment).

Patients can also independently report on anxiety symptoms prior to an office visit. The most useful standardized self-report inventory is the GAD-7 [28], which is a brief scale of frequency of cognitive and somatic symptoms of GAD.

Homework — CBT treatment sessions are typically accompanied by homework assignments, usually daily, to be conducted between sessions. Thus, therapy time for the patient is more extensive than the time spent in-session with therapists.

Components of CBT — CBT uses several techniques or components that address aspects of anxiety and the individual's response to it. It is unclear which components are critical to CBT's effectiveness. Trials have suggested that some components such as relaxation training and cognitive restructuring are effective as stand-alone treatments for GAD [29,30]. Other individual components have been shown to improve symptoms of GAD; however, they have not been compared with standard CBT for GAD. [20,29-39]. Components of CBT are discussed below.

Education — Treatment typically begins with patient education. This includes:

- Informing and correcting misconceptions regarding anxiety, worry, and associated symptoms.

- Identifying causative factors of pathological worry and anxiety that perpetuate GAD.

- Generating a treatment plan and its rationale (ie, symptoms of GAD will subside by using evidence-based and coping-oriented thinking, by dealing directly with anxiety provoking images and situations, and by relaxation training).

Much of this information is integrated in presenting how a pathological cycle of worry and anxiety develops and is maintained in patients' lives.

Self-monitoring — Self-monitoring is introduced in the first treatment session and continues throughout the entire treatment. Patients keep track of significant episodes of worry on a Worry Record (form 1) to be completed as soon as possible during or after each worry episode. The record provides a description of the cues, level of distress, associated symptoms, thoughts, and behaviors. Patients additionally complete a daily mood record at the end of each day to record overall or average levels of anxiety.

Learning to observe their reactions from an objective standpoint can help patients better understand their behavior and improve their self-observation skills. Self-monitoring allows patients to chart their progress in therapy.

Relaxation training — Relaxation training consists of progressive muscle relaxation (after brief deliberate tension) [40] of all muscle groups of the body in a systematic manner. This is paired with a relaxation phrase (such as "relax") that is repeated during the muscle relaxation phase. Breathing exercises, such as slow, diaphragmatic breathing, may be incorporated into relaxation training. Relaxation training ends with a cue-controlled relaxation where the individual cues themselves to relax by simply repeating the paired word. Cue-controlled relaxation is then used as a coping skill for practicing exposure to anxiety-producing images or situations (also referred to as "applied relaxation").

Relaxation training can be particularly meaningful for GAD patients as they often experience elevated muscle tension and reduced flexibility of autonomic functioning [41].

Cognitive restructuring — Cognitive restructuring involves identifying and modifying inaccurate appraisals that contribute to anxiety. (See 'Targeting specific thoughts and behaviors' below.)

For example:

- Examples of patient's experiences are used to show them how overly negative interpretations of events result in anxiety and maladaptive behaviors.

- Errors in thinking such as overestimating the likelihood of negative events and establishing rigid rules or beliefs that underly dysfunctional thought patterns are addressed.

- Patients are encouraged to use an empirical approach to examine the validity of thoughts by considering all of the available evidence.

Therapists use Socratic questioning to help patients make guided discoveries and question their anxious thinking. Using additional evidence gathered in anxiety provoking situations, patients modify inaccurate appraisals and generate new hypothesis and subsequent behaviors. For example, a person who typically avoids taking on new responsibilities due to excessive worries about making mistakes is encouraged to take on new responsibilities and gather evidence on what happens. They might learn that mistakes are less frequent than anticipated and did not have negative consequences. Underlying beliefs that are overly negative can change with the accrual of evidence that challenges these negative thoughts.

Cognitive bias modification programs are an automated version of cognitive restructuring that trains patients to develop neutral (instead of negative) interpretations of ambiguous material [42]. However, a meta-analysis of studies using cognitive bias modifications for patients with anxiety or depression have shown effects sizes for symptomatic outcomes that are small and of questionable significance [43].

Exposure — Exposure techniques are intended to help patients cope with real-life situations with less avoidant behavior. In some populations, such as individuals with dementia or psychosis, exposure to anxiety-producing situations may be contraindicated due to cognitive deficits, misperceptions, or limited self-modulation. (See 'Specific populations' below.)

- **Imagery exposure** – Imagery exposure is designed to help patients tolerate negative affect and autonomic arousal associated with fearful images that they often attempt to avoid through worry [44]. Patients generate hierarchies of fearful images related to two or three main areas of worry and are led through systematic exposure to these images. When anxiety elicited by an image is reduced to a mild level, then patients progress to the next image on the hierarchy. Two main versions of imagery exposure have been developed [31,32]:

  - In one version, patients imagine a worst-case scenario for 25 to 30 minutes, after which they generate alternative outcomes to the scenario. This approach has been shown to be effective for GAD as a standalone treatment in a small randomized trial [33].

  - The second version, self-controlled desensitization, involves utilization of cognitive restructuring and relaxation skills during imagery exposure to anxiety-provoking

situations. It has been incorporated into CBT in a number of studies [45].

- **Exposure to anxiety-provoking situations** – This technique involves repeated exposure to situations that are avoided or engaged in with excessive preparation or checking. Patients generate a hierarchy of situations or activities that they practice being exposed to between sessions. Relaxation techniques and cognitive skills are used to help cope with the anxiety. Examples include allowing children to have sleepovers, going on family vacations, arriving on time (instead of excessively early) at scheduled appointments, taking on responsibilities, or saying "no" to requests. In a randomized trial including 102 adults with GAD, exposure alone was as effective as behavioral activation (designed to increase engagement in rewarding activities) GAD, on measures of self-reported GAD symptoms at posttreatment and six-month follow-up [46].

Additional components — Other techniques that may be incorporated into CBT for GAD include:

- **Problem-solving** – This component can help to combat indecisiveness and increase the ability to generate alternative solutions to problems [47].

- **Time management training and goal setting –** This training can help facilitate present task accomplishment instead of allowing worry to dominate [48].

- **Intermittent motivational interviewing** – In a randomized trial of patients with various anxiety disorders receiving CBT, adjunctive motivational interviewing resulted in subjective improvements in anxiety symptoms as well as other comorbid symptoms, such as depression, compared with adjunctive psychoeducation [49]. (See "Overview of psychotherapies", section on 'Motivational interviewing'.)

Relapse prevention — A final step in CBT is relapse prevention, in which patients are informed that recurrences of worry, anxiety, or avoidance behavior are likely to occur in the future. They are encouraged to view such recurrences as lapses rather than failure, and to reapply their coping skills and reinstitute their practice of exposure to images of negative outcomes and anxiety-provoking situations.

Targeting specific thoughts and behaviors — The central focus of CBT for GAD is teaching patients a set of cognitive and somatic coping skills to effectively manage their anxiety as they are repeatedly exposed to anxiety provoking images and activities. These features of patients with GAD and the CBT approach to them are described below.

Overestimating and catastrophizing negative events — Individuals with GAD have biases in judgment and attention which lead to interpreting ambiguous situations in a threatening manner [42,50,51] or overestimating the likelihood of negative events [52]. These thoughts are often automatic and may lead to intrusive worrying. Overestimations and catastrophizing of negative events are addressed through cognitive restructuring which works to replace these anxious appraisals with more evidence-based ones. (See 'Cognitive restructuring' above.)

Limited confidence in problem solving and low tolerance of uncertainty — Individuals with GAD have low confidence in their problem-solving abilities, partially due to worries over making the "wrong" decision. They often prefer to acquire as much evidence as possible before making decisions, tend to generate all possible negative outcomes, and have a low tolerance for ambiguity compared with individuals without anxiety [53-55]. Such behavioral patterns contribute to distress over decision making and exacerbate anxiety. Deficits in problem solving are targeted through cognitive skills that focus on coping skills, enhanced decision making, and time management. (See 'Components of CBT' above.)

Avoidance behaviors, excessive preparation, checking — Individuals with GAD may also have avoidance behaviors, including excessive preparation (eg, getting to an appointment an hour beforehand to avoid being late), checking behaviors (eg, making sure the children are safe when sleeping), and procrastination [56]. Behavioral practices aim to reduce excessive checking, procrastination, and other "worry" behaviors, and often include repeated exposure to anxiety-provoking situations. In addition, through repeated exposure to catastrophic images, the emotional response and autonomic arousal subsides, which in turn reduces the drive to shift to excessive worry to avoid such images. Finally, progressive muscle relaxation aims to reduce excessive muscle tension and vigilance to threat. (See 'Relaxation training' above.)

Excessive worrying — Individuals with GAD may have excessive worrying. Worry may represent an avoidance behavior by allowing the individual to avoid fearful imagery and the associated autonomic arousal and negative effect [57,58]. According to the contrast avoidance model of worry and anxiety, individuals with GAD are hypersensitive to sharp upward shifts in negative emotion that typically accompany negative events. Such individuals may use worry as a mechanism to avoid these shifts by maintaining a higher baseline level of negative thoughts.

Positive and negative thoughts or beliefs about worry promote further worry and rumination [56]. For example, positive beliefs refer to the positive value of worrying to reach solutions or prevent negative events from occurring. Negative beliefs that worrying is uncontrollable and

harmful (ie, “I’m out of control to worry this excessively”) appear to more strongly predict pathological worry compared with positive beliefs [59]. Negative beliefs generate worry about worry, attempts to suppress further worry, avoidance behaviors, and reassurance seeking [56]. Through CBT, improved self-monitoring, relaxation training, and restructuring cognition are ways of addressing excessive worrying.

ADDRESSING SUBOPTIMAL RESPONSE AND RELAPSE

Factors affecting response — Interpersonal difficulties, poor physical health, and high baseline levels of neuroticism predict poorer outcomes from cognitive-behavioral therapy (CBT) for generalized anxiety disorder (GAD) [9,38,60,61].

However, studies of the influence of comorbidity on the outcome of CBT for GAD are mixed. Some studies find that baseline comorbidity is associated with a worse outcome than in individuals without comorbidities [60], although a number of studies show either no effect or improved outcomes in GAD with a co-occurring disorder [62-66]. (See "Generalized anxiety disorder in adults: Epidemiology, pathogenesis, clinical manifestations, course, assessment, and diagnosis".)

Poor or partial response — Additional CBT sessions are typically provided to patients with GAD who experience a partial symptom reduction in response to CBT. Patients who experience a poor response, with minimal symptom reduction or functional improvement, are typically reassessed to identify and address:

- Co-occurring conditions in need of treatment.
- Ongoing life stress that warrants greater focus on problem solving within the CBT.
- Family interactional styles that may be inadvertently reinforcing GAD.
- The potential utility of a different CBT model or different type of psychotherapy such as psychodynamic psychotherapy. (See 'Limited role of other psychotherapies' below.)
- The potential for benefit from including family members in the treatment to enhance generalization of CBT skills.

Additionally, many patients with GAD who have had partial or poor response to CBT may benefit from medication augmentation. For individuals with suboptimal response who are amenable to medications, we augment CBT with pharmacologic therapy. Medication selection is discussed in

detail elsewhere. (See "Generalized anxiety disorder in adults: Management", section on 'Initial Pharmacotherapy'.)

Relapse of symptoms — In cases of subsequent GAD recurrence, it is not uncommon for patients to return for additional CBT following relapse, either in the form of several booster sessions or a full course of CBT. Although there are no empirical studies on these practices, in our clinical experience individuals who responded positively to the first round of CBT often respond positively again to CBT.

SPECIFIC POPULATIONS

- **Older adults** – Our general approach to cognitive-behavioral therapy (CBT) in adults is largely the same regardless of age. However, for older patients, we are more likely to suggest group treatment because this format encourages interaction with others and opportunities for self-disclosure. This may increase the efficacy of CBT in older adults [67]. Additional modifications for older adults include learning aids (eg, acronyms for techniques) and memory enhancers (eg, homework reminders, weekly reviews of techniques) to compensate for reduced short- and long-term memory abilities, fewer homework assignments, and a slower pace of CBT sessions.

  Responses to CBT among older adults may be lower compared with younger adults [63,68-70]. For example, in late-life samples with generalized anxiety disorder (GAD) treated with CBT in primary care, only 40 percent of the intent-to-treat sample was classified as responders compared with an average of 56 percent response rate found in trials of non-late-life samples.

- **Children and adolescents** – Clinical trials have found CBT to be effective for GAD in children and adolescents [18,20,22,67,69,71]. This topic is reviewed separately. (See "Psychotherapy for anxiety disorders in children and adolescents".)

- **Patients with medical comorbidity** – In patients with medical conditions potentially exacerbated by high levels of autonomic arousal (eg, certain arrhythmias or high blood pressure), a more graduated approach may be preferable to intensive exposure, with ongoing monitoring of medical status.

- **Patients with cognitive deficits, psychosis, or thought disorder** – Exposure to anxiety-producing situations may be contraindicated for persons with dementia, psychosis, and other thought disorders. In these individuals, cognitive deficits and misperceptions, limited capacity for self-observation and self-modulation, and impaired coping skills may diminish the effectiveness of CBT.

LIMITED ROLE OF OTHER PSYCHOTHERAPIES

While nearly all clinical trials of psychotherapy effective in generalized anxiety disorder (GAD) focus on cognitive-behavioral therapy (CBT), other psychotherapies have received limited study in patients with the disorder. We typically try these approaches after treatment with CBT has been found to be suboptimal.

Psychodynamic therapy — In psychodynamic approaches to GAD, treatment typically focuses upon core conflictual relationship themes. Emphasis is placed upon positive therapeutic alliances to offset insecure attachments.

While data have not found psychodynamic therapy to be as effective as CBT in the treatment of GAD, a trial suggested it may be more effective than supportive therapy [72-74]. In the trial, 31 individuals with GAD were randomly assigned to either supportive-expressive therapy (a short-term psychodynamic therapy) or supportive therapy [72]. While no difference was seen in mean GAD symptom reduction, subjects in the supportive-expressive therapy group had a higher rate of remission than those in supportive therapy.

Emotional regulation therapy — Emotional regulation therapy incorporates components of CBT such as psychoeducation and self-monitoring, as well as interventions that address emotion regulation (deficits prominent in GAD), emotional avoidance, and interpersonal difficulties [75]. A clinical trial comparing CBT plus emotion-focused and interpersonal strategies with CBT plus supportive listening in 83 patients with GAD found both groups to experience reduced GAD symptoms, with no differences seen between groups [45].

Mindfulness and acceptance and commitment therapy

- **Mindfulness** – When practicing mindfulness, the patient makes nonjudgmental observations of moment-to-moment experiences. In a clinical trial, mindfulness-based stress reduction therapy was compared with stress management education in the treatment of GAD [76]. Individuals in the mindfulness group experienced greater improvements in anxiety symptoms, overall symptoms, and anxiety in response to a stressful challenge than those in the stress management education group at eight-week follow-up.

- **Acceptance and commitment therapy (ACT)** – This combines mindfulness with acceptance of internal states and orientation of actions towards valued goals [77]. Although there are some similarities between an ACT approach and a CBT approach [78], ACT does not involve any form of cognitive restructuring (ie, identifying, challenging, and replacing negative

thinking with more realistic thinking) or any attempt to change or correct somatic dysregulation (eg, relaxation training).

A randomized clinical trial compared ACT to applied relaxation in 81 patients with GAD [35]. ACT-treated patients experienced reductions in independent clinician ratings of severity on the Hamilton Anxiety Rating Scale and on self-report symptom measures of worry, anxiety, and depression; however, the results did not differ significantly from the group treated with applied relaxation training.

SOCIETY GUIDELINE LINKS

Links to society and government-sponsored guidelines from selected countries and regions around the world are provided separately. (See "Society guideline links: Anxiety and anxiety disorders in adults".)

SUMMARY AND RECOMMENDATIONS

- **Cognitive-behavioral therapy (CBT) as first-line psychotherapy** – For patients who opt for psychotherapy, we suggest CBT as the preferred form (**Grade 2C**). CBT uses reasoning exercises or real experiences to facilitate symptom reduction and improve functioning. (See 'CBT as first-line psychotherapy' above.)

- **Administering CBT** – CBT for generalized anxiety disorder (GAD) is a generally delivered by a trained therapist in face-to-face sessions with manualized guidance and homework. Other methods such as computer-based and telephone-delivered formats have been developed and can be used in specific circumstances (eg, for patients in remote locations). (See 'Administering cognitive-behavioral therapy' above.)

- **Components of CBT –** CBT uses various components or specific techniques that address aspects of anxiety and the individual's response to it. These techniques include patient education, self-monitoring, relaxation training, cognitive restructuring, exposure to imagery and anxiety-producing situations, and relapse prevention. (See 'Components of CBT' above.)

- **Targeting specific thoughts and behaviors** – Specific thoughts (eg, uncontrolled worry and overestimating or catastrophizing events) and behaviors (eg, excessive preparation and avoidance) are targeted in CBT. Individuals learn to challenge cognitive biases and improve decision making skills through repeated exposure to anxiety provoking situations and their effects. (See 'Targeting specific thoughts and behaviors' above.)

- **Addressing suboptimal response** – Additional CBT sessions are typically provided to patients with GAD who experience a partial but incomplete symptom reduction. Patients who have no response, with minimal symptom reduction or functional improvement, are typically reassessed to evaluate for and address comorbid conditions, specific stressors, family involvement and support, and medication augmentation. (See 'Addressing suboptimal response and relapse' above.)

- **Specific populations** – Older adults, individuals with medical comorbidities, and individuals with thought disorders or cognitive deficits may warrant certain modifications to CBT (eg, group CBT for older adults, more graduated exposure with severe medical conditions). (See 'Specific populations' above.)

- **Other psychotherapies** – While almost all clinical trials focus on CBT treatment for GAD, other forms of therapy such as psychodynamic psychotherapy, emotional regulation therapy, and mindfulness and acceptance and commitment therapy have potential benefits in the treatment of GAD. However, evidence in support of these are limited, and our practice is to use these only after CBT treatment is found to be suboptimal. (See 'Limited role of other psychotherapies' above.)

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GRAPHICS

Worry record

Date:_____ Time began:_____ (AM/PM) Time ended:_____ (AM/PM)

Maximum level of anxiety (circle a number below):

0 10 20 30 40 50 60 70 80 90 100

None Mild Moderate Strong Extreme

Indicate which of the following symptoms you are experiencing:

Restlessness, feeling keyed up or on edge _____
Easily fatigued _____
Difficulty concentrating or mind going blank _____
Irritability _____
Muscle tension _____
Sleep disturbance _____

Triggering event:

Anxious thoughts:

Anxious behaviors:

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