

Chapter 2

Diagnosis and Assessment

There is little debate about at least one topic – GAD is one of the most difficult disorders to assess and diagnose with any significant consistency (Holmes & Newman, 2006). The reasons for this barrier in establishing a clear and precise diagnosis are the following: (1) complexities in the interpretation of *DSM* criteria, (2) symptoms overlap with other disorders, (3) questions regarding diagnostic threshold, and (4) patient variability in reporting symptoms (Brown, Di Nardo, Lehman and Campbell 2001). Turk and Wolanin (2006) echo the above conviction, by arguing that assessment and diagnosis of GAD have been impeded by the consistent evolution of the diagnostic criteria with each revision of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM), hampering development of theoretical models and retarding development of instruments consistent with these models. Of all the anxiety disorders, GAD is one of the least reliably diagnosed (Di Nardo, 1993). Owing to these challenges, some researchers have recommended the use of two independent structured interviews in order to obtain an accurate diagnosis (Borkovec & Newman, 1998; Borkovec & Whisman, 1996). Given these constraints, Holmes and Newman (2006, p. 109) write, “Clearly there are subtleties in the diagnostic criteria and symptom picture of GAD that need to be taken into consideration during assessment.” Tyrer and Baldwin (2006) feel that anxiety has easily detectable symptoms; the inherent difficulty lies in the interpretation.

There is no disputing the fact that anxiety, and more particularly GAD (at least on the surface), can be perceived as a shared and intrinsic human response that can universally be experienced during times of stress as a threat or challenge (McLellarn & Rosenzweig, 2004). Therefore, assessment and diagnosis of GAD needs to focus on the magnitude (intensity, pervasiveness, and persistence) of the worry and anxiety reported. In a previous discussion, complications can arise in locating the often blurred boundaries between normal and pathological worry and anxiety with other diagnoses (Barlow, 1988, 2002), and the symptom overlap between GAD and depressive disorders (Brown, Marten, & Barlow, 1995; Holmes & Newman, 2006). In the end, making the delicate, yet painstaking diagnosis favoring GAD over other disorders is often left to the discretion of the treating clinician (Hoehn-Saric, Borkovec, & Nemiah, 1995; Lipschitz, 1988). What makes these diagnostic quagmires easier to navigate is a solid understanding of the most recent criteria for the

disorder (to be taken up next), and reliable and valid assessment instruments in the hands of a skilled clinician.

DSM-IV-TR: Diagnostic Criteria for Generalized Anxiety Disorder

What is generalized anxiety disorder (GAD) from a diagnostic point of view? In the *DSM-IV-TR* (American Psychiatric Association [APA], 2000; see Table 2.1) there are highly defined criteria that can assist the clinician in answering this question, making the step to diagnosing GAD that much easier. Without a thorough knowledge of these criteria, the assessment of the diagnosis is doomed to fail. That is what belies the rationale for placing the diagnostic criteria for GAD in this publication first, before spending an extended period of time focused on assessment.

Table 2.1 *DSM-IV-TR* diagnostic criteria for generalized anxiety disorder

A	Excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least 6 months, about a number of events or activities (such as work or school performance).
B	The person finds it difficult to control the worry.
C	The anxiety and worry are associated with three (or more) of the following six symptoms (with at least some symptoms present for more days than not for the past 6 months). <i>Note:</i> Only one item is required in children. (1) Restlessness or feeling keyed up or on edge (2) Being easily fatigued (3) Difficulty concentrating or mind going blank (4) Irritability (5) Muscle tension (6) Sleep disturbance (difficulty falling or staying asleep, or restless unsatisfying sleep)
D	The focus of the anxiety and worry is not confined to features or an Axis I disorder; e.g., the anxiety or worry is not about having a panic attack (as in panic disorder), being embarrassed in public (as in social phobia), being contaminated (as in obsessive-compulsive disorder), being away from home or close relatives (as in separation anxiety disorder), gaining weight (as in anorexia nervosa), having multiple physical complaints (as in somatization disorder), or having a serious illness (as in hypochondriasis), and the anxiety and worry do not occur exclusively during posttraumatic stress disorder.
E	The anxiety, worry, or physical symptoms cause clinically significant distress or impairment in social, occupational or other important areas of functioning.
F	The disturbance is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hyperthyroidism) and does not occur exclusively during a mood disorder, a psychotic disorder, or a pervasive developmental disorder.

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At the heart of GAD is excessive anxiety and worry (“apprehensive expectation”), lasting for at least 6 months, occurring more days than not, about a number of events and activities (e.g., work, school, performance). In addition, three of six symptoms need to be present (restlessness, easily fatigued, poor concentration, muscle tension, and sleep disturbance) to make the diagnosis. The disorder causes significant distress or impairment in functioning. Worry or anxious apprehension is not the result of another disorder or related to any organic cause.

From the above criteria listed, Dugas and Robichaud (2007) argue that GAD is more streamlined and independent as a disorder. In addition, the term “unrealistic” was dropped and replaced with “difficult to control” worry. Worry themes are not unusual or odd in and of themselves (Starcevic, 2005). It now becomes a quantitative difference in worry frequency and intensity, focusing on why (matter of degree), how (Starcevic, 2005), and not the content per se of the worries. The somatic criteria were also decreased, and there is less focus on symptoms deriving from the autonomic nervous system. The coined term “the walking wounded” (Dugas & Robichaud, 2007), not the “worried well,” seems to be a more apt description of what is going on with these patients phenomenologically. In other words, these authors feel that worry is a universal experience that GAD sufferers endure “silently” (this clinician’s emphasis) to a greater degree than non-GAD individuals.

In regard to teasing out GAD from other diagnoses, it becomes imperative to differentially rule out GAD from other potential candidates. GAD can commonly be mistaken for hypochondriasis, social anxiety disorder, obsessive–compulsive disorder, posttraumatic stress disorder, major depressive disorder, dysthymic disorder, panic disorder, personality disorders, and other psychiatric and medical conditions. Three excellent references (Dugas & Robichaud, 2007; Nutt et al., 2001; Rygh & Sanderson, 2004) do a comprehensive job of helping the clinician make the appropriate differential diagnosis of GAD from comorbid diagnoses.

Suffice it to say, for our purposes, GAD can be discriminated from the diagnoses mentioned above, based on a few key, but important, differences. These conclusions are drawn from varied sources and through clinical experience with these patients. Regarding GAD vs. hypochondriasis, the health worry in GAD is one of a number of different worry domains, and involves less likelihood of focusing on minor physical symptoms, whereas in health anxiety, it is the main preoccupying concern of having a serious disease that is central to the diagnosis. Little to no reassurance can assuage someone suffering from hypochondriasis. In the case of GAD vs. social anxiety disorder, both disorders can cause the sufferer to worry about the perception of others. However, in GAD there is considerably less overt behavioral avoidance, compared with social anxiety disorder. With social anxiety, the anticipation of being judged or having to face the public and perform in front of others is much more terrifying than with those who have GAD. When comparing GAD and obsessive–compulsive disorder, we find that in GAD the worries are ego syntonic (congruent with reality/about real-life happenings), whereas in obsessive–compulsive disorder the obsessions are ego dystonic (incongruent with real life to the point of being odd or horrific). In addition, combined with the obsessions in

obsessive–compulsive disorder, there are often compulsions (rituals to reduce anxiety) that are less common in GAD, even though compulsive checking can accompany GAD (Schut et al., 2001). Nutt et al. (2001) go so far to say that GAD can be viewed as a cognitive variant of obsessional checking. This is an intriguing conceptualization worthy of further exploration and research. In the case of GAD and panic disorder, GAD symptoms of worry are more persistent around life circumstances, whereas panic symptoms of “heightened anxiety” tend to be discrete or acute episodes, and comprise greater autonomic hyperactivity concerning fear of misperceived and catastrophic physical sensations. Posttraumatic stress disorder’s main symptom is the experiencing or reliving of a past major trauma or stressor. Even though GAD sufferers often report having experienced several traumas in their lives, they are not as self-absorbed with the trauma or fearful of talking about it with the clinician, than those having PTSD. Most PTSD patients avoid facing the trauma or abuse, and a sequelae of symptoms flare up when encouraged to discuss and process the event(s).

Another area of contention diagnostically, is whether GAD is more akin to a personality disorder, rather than an Axis I symptom-based disturbance. Akiskal (1998) feels that GAD has a prominent anxious temperament component, similar to a personality disorder. It is not inaccurate to point out that the traits of GAD can be highly inflexible and pervasive across a wide range of situations. Shapiro (1965, 1989) has called this a “neurotic style.” The ICD-10 (World Health Organization, 2007) (the European equivalent of the *DSM*) does refer to an “anxious personality disorder” which has never gained a strong foothold in the *DSM* classification system, in spite of some discussions about the conceptualization. In viewing GAD this way, one could make a claim that all aspects of the personality and character seem to be adversely affected by the disorder and may prove to be responsive to process oriented treatment (Kernberg, personal communication, 2007; Portman, 1995). Blashfield et al. (1994) claim that GAD is associated with severe character pathology, such as mistrust, suspicion, hostility, irritability, and obsessive–compulsive personality disorder.

Yet, accumulating evidence does not seem to support GAD as a personality disorder, given research bearing on comorbidity rates and the fact that pure GAD is as impairing as other anxiety and depressive disturbances (Kessler, Walters, & Wittchen, 2004). Together, this data and other empirical support beyond the scope of the present publication appear to confirm GAD’s status (despite the critics) as an independent Axis I diagnosis (Brawman-Mintzer, 2001; Kessler et al., 2004). This does not preclude the fact that GAD is responsive to effective treatments, aside from standardized CBT, that target personality correlates and broader indices of functioning, which will be discussed in a later chapter.

Given that the most frequently comorbid and difficult differential diagnosis takes place with GAD and mood disorders, it is essential to have a good command of their commonalities and differences. What they have in common is an overlap in somatic symptoms (sleep disturbance, lack of concentration, and fatigue). However, worries in GAD are about potentially threatening future events happening (sometimes consisting of negative events about the past), while in depression, ruminations tend to focus on the failings of the past. In addition, self-esteem in GAD is selectively

low, and in depression the erosions of the self are on a more global scale (Beck, Emery & Greenberg, 1985). Muscle tension is more unique to GAD, whereas anhedonia (loss of pleasure in things and persistent feelings of sadness) predominates in depression. Yet, dysphoric mood can also accompany GAD when the chronicity and magnitude of the illness are more pronounced. McHugh and Slavney (1998) refer to this as “dysphoric anxiety.” In major depressive disorder, the mood disturbance lasts at least 2 weeks, whereas with dysthymic disorder (a less severe, though more chronic form of depression), the duration persists for a period of at least 2 years. GAD symptoms have to be present for at least 6 months to make a diagnosis. In many cases, GAD is often temporally first to mood disorders in order of occurrence. When they do co-occur, the outcome is much greater symptom and functional severity. One other difference regarding GAD is that life event exposure to danger is a predisposing risk factor, contrasted by depressive illness, where events are more inclined to be related to loss. In both cases of GAD and depression, the disorders share a course that is generally chronic, highly destabilizing, and severe in nature. Depression is often perceived by the public as more debilitating, while the worry and anxiety in GAD tends to be viewed as more “normal” and common. Either way, GAD and depression are inherently challenging conditions for the sufferer and clinician, in spite of public perception.

Assessment

Many different assessment tools have been used for the purpose of assessing the presence of GAD, which can include a clinical interview/evaluation, structured interviews, and self-report measures and inventories. However, in many clinical settings, such as private practices, agencies, and clinics, clinicians rely almost exclusively on one-to-one sessions to (1) assess for the diagnosis, and (2) determine patient's posttreatment outcomes (Rygh & Sanderson, 2004). Unfortunately, GAD is too difficult a condition to diagnose accurately without using formalized assessment measures, such as structured and unstructured instruments (Antony, Orsillo, & Roemer, 2001; Brown, O'Leary, & Barlow, 2001; Davey & Wells, 2006).

Belzer and Schneier (2006, p. 26) bring the point home by stating that “given its prevalence and associated impairment, the significant burden imposed on health care resources, accurate assessment of GAD and its severity by mental health and primary care clinicians is an increasingly important goal. Reliable diagnosis and assessment of disorder severity can guide the nature, frequency and duration of therapeutic interventions. Moreover, accurate assessment of initial disorder severity provides a benchmark from which ongoing evaluation of treatment effectiveness can proceed”.

One of the initial standard practices in assessing GAD and other psychiatric disorders is to rule out any medical comorbidity from the start (Fricchione, 2004). This is especially true when the medical conditions are associated with anxiety, and can often include cardiac, pulmonary, neurologic, endocrine illnesses, and even hypothyroidism (Goldberg & Posner, 2000).

In addition, substance abuse should be excluded, as cocaine, other stimulants, caffeine, drug withdrawal, (alcohol, opiates, benzodiazepines), over-the-counter and prescribed medications can mimic anxiety symptoms (Pollack, Smoller, & Lee, 1998). Rosenbaum, Pollack, Otto, and Bernstein (1997) argue that medical illnesses, accompanied by anxiety, often have an onset after 35 years of age, no personal/family history, no current increase in stress, little or no avoidance of anxiety-provoking situations, and poorer response to anxiolytics. In the case of GAD, teasing the disorder out from a medical condition requires that a history and complete physical examination be performed. In a previous discussion, some detail was devoted to discussing the challenges of establishing a differential diagnosis when the potential exists for there to be the co-occurrence of other psychiatric disorders. These should also be definitively ruled out, if there is no support for their presence. Assessment for suicide risk should be screened in suspected cases of GAD, given the strong association with depression (Olfson, Weissman, Leon, Sheehan, & Farber, 1996).

Even though PCPs and other medical specialists must take the lead in attempting to rule out GAD from other possible medical conditions, coordinated care between physicians and nonmedical mental health clinicians plays a vital role in exchanging collateral information and forming a collaborative multidisciplinary relationship. Generally, the more professionals involved in the care of a patient with GAD, the better, as this can assist in facilitating a smoother assessment process for such a complex and challenging diagnosis. However, one of the problems with this idealized picture is that GAD is not well recognized in the primary care setting (Hoge, Oppenheimer, & Simon, 2004). In a German survey of 20,000 primary care patients, PCPs recognized and diagnosed pure GAD 34% of the time, and 44% were either treated or referred to a nonspecialist (Wittchen et al., 2002). It seems to suggest that the seemingly vague nature of the symptoms and common somatic clinical presentations confound PCPs. This is troubling because of the reality that it is the most frequent anxiety disorder seen in primary care practice (Sherbourne, Wells, Meredith, Jackson, & Camp, 1996). Stein (2005), a world-class psychiatrist and expert on anxiety, argues that assessment of the disorder requires addressing both the acute and chronic psychic and somatic symptoms of tension and avoidance behaviors, such as worry. Some assessment tools to aid the PCP in better detecting GAD will be discussed in the near future.

For the mental health clinician there are also challenges in correctly assessing GAD. In spite of the hypothesis that mental health specialists (including psychiatrists) should be better equipped than their colleagues in primary care in assessing GAD, this is not always the case. Roemer and Medaglia (2001) discuss a host of targets that ideally need to be assessed for GAD. Many of these are missed, even by skilled clinicians. Some of these targets are more obvious, like worry and anxiety (both psychic and somatic), yet familiarity with associated features (tension, trouble sleeping, fatigue) and teasing out comorbid symptoms (social anxiety, panic, obsessive-compulsive, depressive) are often what create confusion. In addition, the occurrences, frequency, controllability, pervasiveness of worry, and maintenance factors associated with worry are also emphasized by the authors as important in the assessment process. Turk and Wolanin (2006) also make a case that assessing comorbid symptoms, degree of impairment, quality of life, and measures

of change during treatment that are consistent with contemporary theoretical models is of critical value. Now we turn to the varied assessment instruments used to assess and diagnose GAD.

The Clinical Interview

The clinical interview may still have its place as a point of departure in the assessment of GAD. The verdict, as we shall see, does not seem to favor its use (especially as a sole means of assessment). Many clinicians feel that in the first few sessions, it is important to establish rapport and, in a more informal sense, attempt to elicit information from the patient. Loosely structured clinical interviews appear to be used with the greatest frequency by practitioners in private practice and various outpatient settings (Rygh & Sanderson, 2004).

One type of clinical interview, called the Life Context Interview, attempts to address GAD over the life span by assessing onset, circumstances, duration, course, life events associated with exacerbations, coping efforts, and previous treatments (Rygh & Sanderson, 2004). According to Durham and Fisher (2007), asking the right questions can help establish the right disorder, even when others coexist. They argue that the somatic symptoms of GAD are more straightforward, whereas the cognitive ones require more determination and probing to get to the root of GAD. Dugas and Rochibaud (2007), in their clinical protocol, spend two full sessions on information gathering related to each major worry topic. According to these experts in the field, the clinical interview should focus the assessment on the patient's worry in an attempt to establish a diagnosis, rather than concentrating on somatic symptoms. At a later point, GAD somatic symptoms (such as muscle tension), impairment and distress become areas of inquiry to learn more about the patient in order to gain a deeper diagnostic perspective.

This information gathering assessment enhances the clinician's confidence in diagnosing GAD, builds the therapeutic alliance, and gives a more complete picture of the patient. In spite of the advantages that an unstructured clinical interview may hold for some clinicians, and the fact that they are common in the settings described, they are too prone to error (bias of the clinician, lack of awareness of the patient presenting for treatment) (Garb, 1998). The biases of both clinician and patient may direct the interview, and vital information may be missed or deemphasized (Miller, 2003). The general consensus is that unstructured clinical interviews are not well suited for assessment and diagnosis purposes in the case of GAD (Turk & Wolanin, 2006).

Structured Interviews

There are several advantages to structured clinical interviews. The most advantageous reasons for their use in assessment are the following: (1) have established psychometric properties, (2) provide structure for a thorough assessment of diagnostic conditions – not

left up to subjective judgment, (3) a few provide severity ratings – allow for more specific treatment planning and outcome measures, and (4) can be less flexible and labor intensive, but the positives outweigh the disadvantages (Miller, 2003; Miller, Dasher, Collins, Griffiths, & Brown, 2001; Turk & Wolanin, 2006).

The two most widely used structured interviews to assess GAD are The Anxiety Disorders Schedule for *DSM-IV* (ADIS-IV; Brown, Di Nardo, & Barlow, 1994) and The Structured Clinical Interview for *DSM-IV* (SCID-IV; First, Spitzer, Gibbons, & Williams, 1997). There is also the lifetime version of the first scale, called the Anxiety Disorders Interview Schedule for *DSM-IV* Lifetime Version (ADIS-IV-L; Di Nardo, Brown, & Barlow, 1994). In terms of the SCID-IV, there is also a newer version that conforms to *DSM-IV-TR* (APA, 2000), called the SCID-I/P (First, Spitzer, Gibbons, & Williams, 2001).

The ADIS-IV is the preferred choice of the two in assessing GAD. It assesses for onset, remission, temporal sequence, and existence of comorbid disorders (i.e., anxiety, depressive, substance abuse) and symptom intensity for associated/core features of GAD (even when the condition is subsyndromal) (Holmes & Newman, 2006). In other words, the ADIS-IV is a comprehensive diagnostic assessment tool for each anxiety disorder (Turk, Heimberg, & Mennin, 2004). The GAD section of the ADIS-IV (Brown et al., 1994) includes questions related to excessive and uncontrollable worry in multiple life domains (health, work, finances) and associated *DSM-IV* symptoms (like the full scale). Clinician severity rating (CSR) is based on a 0–8 scale. A rating of 4 or higher indicates a diagnosis of GAD. In cases of multiple diagnoses with ratings over 4, the highest clinician rating score is viewed as the primary diagnosis. Brown et al. (2001) found good interrater reliability for ratings of excessiveness of worry, uncontrollability of worry, and associated symptoms (e.g. muscle tension). Good interrater reliability was also found for the clinician severity rating for GAD ($r = 0.72$). They also found fair to good reliability for the current principle diagnosis ($k = 0.67$), current clinical diagnosis ($k = 0.65$), and fair interrater reliability for GAD as a past diagnosis ($k = 0.65$). In summary, the ADIS-IV is the gold standard for structured clinical assessment of GAD (Turk & Wolanin, 2006).

The SCID-IV is a common structured assessment tool for Axis I disorders. It is limited in scope in assessing *DSM-IV* criteria and may not be that reliable with regard to diagnosing GAD (Holmes & Newman, 2006). It does assess a broader range of disorders than the ADIS-IV; however, it does not provide dimensional severity ratings for either diagnoses or symptoms (Turk et al., 2004). Zanarini et al. (2000) found that $k = 0.63$ for a diagnosis of GAD and test–retest reliability is $k = 0.44$ for a diagnosis of GAD. It appears that, due to the low interrater reliability, more research is needed in this area.

Given the length of these two structured interviews, and due to copyright laws, they are not included in the appendix of selected assessments for GAD in this publication. However, the interested clinician can find out more about these instruments (based on their credentials and skill set) and avail themselves of detailed information via Oxford Press for the ADIS-IV, and the American Psychiatric Association for the SCID-IV. They can also be purchased at these publishing houses.

This clinician has a preference for using the ADIS-IV in the assessment and diagnosis of GAD. Yet, each clinician will need to decide for themselves which instrument speaks to them and best fits the needs of their patients. In the end, assessment for GAD is enhanced using structured clinical interviews.

Self-Report Measures

There are several reasons to use self-reports and inventories in the assessment of GAD, which include the advantages of brevity, ease of administration, and decreased demand on human resources (Belzer & Schneier, 2006). Many self-report measures exist, but few with the function of actually diagnosing GAD (Holmes & Newman, 2006). A summary of several of the more popular ones are listed below. The following self-report measures have proven the most accessible and helpful to this clinician.

Depression Anxiety Stress Scales (DASS; Lovibond & Lovibond, 1995)

The Depression Anxiety Stress Scales (DASS) is a 42-item, self-report instrument designed to measure the negative emotional states of depression, anxiety, and stress. Each of the three DASS scales contains 14 items, divided into subscales of 2–5 items with similar content. Subjects are asked to use 4-point severity and frequency scales to rate the extent that they have experienced depression, anxiety, or stress over the past week. The DASS has excellent reliability on all three scales (Depression = 0.91, Anxiety = 0.84, Stress = 0.90). In particular, what is pertinent for our purposes is that “the Stress scale as a whole comprises a coherent set of symptoms, which in appropriate circumstances, permit a sharper differentiation than the Anxiety scale, and a closer link with stressful life events” (not uncommon in GAD) (Lovibond & Lovibond, 1995, p. 34). The architects of this inventory also add that the Stress scale measures a syndrome distinct from depression and anxiety and quite similar to the *DSM-IV* diagnosis of GAD (see Appendix A).

Penn State Worry Questionnaire (PSWQ; Meyer, Miller, Metzger, & Borkovec, 1990)

The Penn State Worry Questionnaire (PSWQ) is a widely used measure, but is not meant to be diagnostic in nature. It is a 16-item trait measure of clinical worry. This self-report inventory assesses the typical tendency of an individual to worry, as well as the degree of excessiveness of worry. The respondents are asked to rate each item

on a 5-point scale ranging from *not typical at all* to *very typical*. Scores range from 16 to 64, with higher scores reflecting greater worry. It has good internal consistency using a sample of patients diagnosed with GAD having a coefficient alpha = 0.86 (Brown, Antony, & Barlow, 1992). The PSWQ also has good test–retest reliability ($r = 0.92$) (Meyer et al., 1990). In all, this measurement has good psychometric properties and sensitivity to treatment change and is a good choice for research and clinical studies – assessing the intensity of pathological worry (Turk et al., 2004) (see Appendix A).

Generalized Anxiety Disorder Questionnaire (GADQ-IV; Newman et al., 2002)

The Generalized Anxiety Disorder Questionnaire (GADQ-IV) is a nine-item, Likert scale measured screening for GAD based on the *DSM-IV* diagnostic criteria. It has good psychometric properties, with specificity = 89%, sensitivity = 83%, and 2-week test–retest reliability = 92% (Newman et al., 2002). The GADQ-IV is a good initial screening device for GAD – to tease out those not meeting *DSM-IV* criteria and before a costlier structured interview is used for further assessment (Holmes & Newman, 2006). The scale measures excessiveness and uncontrollability of worry, and severity of related somatic symptoms. For scoring purposes, a cutoff score of 5.7 has been the standard in assessing whether individuals have GAD, rather than matching responses (Newman et al., 2002). Further research is needed to address its validity and sensitivity as a measure of treatment outcome (Turk et al., 2004) (see Appendix A).

Several self-report inventories measure quality of life or similar indices of well-being. Given that quality of life has been shown to be compromised in GAD patients, a measure of these indices can be helpful in the assessment process. The three most popular, Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985), Quality of Life, Enjoyment, and Satisfaction Questionnaire (Q-LES-Q; Endicott, Nee, Harrison, & Blumenthal, 1993), and the Quality of Life Inventory (QOLI; Frisch, 1994), can be incorporated in the assessment process. All of these scales have good psychometric properties, and both the SWLS (see Appendix A) and QOLI are this clinician's preference. The SWLS is not registered in the public domain and can be easily downloaded, making its use in assessment more user-friendly than the other instruments. Many favor the QOLI, given that it is the most comprehensive measure of overall quality of life, as the scale addresses 16 critical areas. Another scale that has received far less attention, called Scales of Well-Being (PWB; Ryff, 1989), has good reliability, theoretical ties to the positive psychology movement and well-being therapy; yet there is only preliminary evidence of validity for this measure and it can be somewhat cumbersome and time-consuming to complete.

Many other measures exist as well, and knowledge and use of these will, in large part, depend on the clinician's theoretical persuasion and penchant for a particular

instrument that derives from that conceptual model. For example, The Meta-Cognitions Questionnaire (MCQ; Cartwright-Hatton & Wells, 1997) measures beliefs about worry and metacognitive processes, while The Anxious Thoughts Inventory (AnTI; Wells, 1994), distinguishes between type I and type II worries; both have their derivation in the metacognitive model, to be discussed in the next chapter. The same can be said for The Intolerance of Uncertainty Scale (IUS; Buhr & Dugas, 2002) that targets how an individual responds to uncertainty. This scale also stems from a particular conceptual model. Another measure related to a theoretical model is experiential avoidance that is common in GAD, which can be assessed using The Acceptance and Action Questionnaire (AAQ; Hayes et al., 2004).

Several other inventories are worthy of mention, which are the following: The Worry Domains Questionnaire (WDQ; Tallis, Eysenck, & Matthews, 1992) measures the content of worry; The Why Worry? (WW; Freeston, Rheaume, Letarte, Dugas, & Ladouceur, 1994) and revised Why Worry II Questionnaires (WW-II; Holowka, Dugas, Francis, & Laugesen, 2000) measure metaworry; and The Consequences of Worrying Scale (CWQ; Davey, Tallis, & Capuzzo, 1996) measures the consequences of worry.

One would think that the topic of assessment for GAD and related constructs would be an exhausted one at this point. However, some recent assessment instrumentation has been undergoing development in order to add precision in the identification of GAD. These tools may ultimately prove more useful to PCPs and medical specialists than to mental health professionals, who need quicker and more efficient ways to identify and treat patients with GAD who present in primary care settings.

Argyropoulous et al. (2007) have developed a specific 18-item self-rated instrument for the measurement of GAD, that is based on *DSM* criteria. The tool is called The Generalized Anxiety Disorder Inventory (GADI), and was tested on 197 outpatients and 522 clinical subjects in four studies. The scale comprises three factors – cognitive, somatic, and sleep symptoms. The GADI has measurement precision (akin to reliability) in all three factors, and convergent and divergent validity. It accurately distinguishes GAD patients from nonpatient controls. The scale was constructed because of the researchers' conclusions that current instruments have inherent limitations or do not conform to the current concept of the condition. They argue that the PSWQ, for example, does not measure GAD and conceptualizes the disorder as a personality trait (worry), rather than a fluctuating state. The GADQ-IV does not give a definite numeric score to assess severity, even though it is accurate in detecting and diagnosing GAD.

Notwithstanding these critiques, the GADI is still in its infancy. In spite of claims of being easy to complete, having good reliability, and being able to assess a general GAD factor, plus three other factors, it professes to track changes in GAD over time. It is not intended to replace the diagnostic interview, albeit the claim is made that it might be used for that purpose in the future (the authors are unclear whether this refers to the clinical interview or the more structured interviews). Clearly, more research is needed to obtain test-retest reliability and determine whether the term "precision" is in actuality the same as reliability. This scale, if better refined, may be equally useful to clinicians at some point, not just medical providers.

The Generalized Anxiety Disorder Severity Scale (GADSS; Shear, Belnap, Mazumdar, Houck, & Rollman, 2006) is a simple six-item interview assessment that evaluates the severity of each GAD DSM-IV symptom. It is intended for researchers and clinicians in primary care settings. The sample for the GADSS came from four primary care facilities, with patients having the diagnosis of GAD or panic that participated in a collaborative study. They were then evaluated at a 12-month follow-up. The inventory is an attempt to rate the severity of GAD over the telephone with patients who already have an established diagnosis. It purports to have high internal consistency and good validity and sensitivity to change. The scoring ranges, on a 5-point scale, from 0 (*none*) to 4 (*very severe*). For the sake of brevity and efficiency, in the primary care setting it may have some value, as it addresses a target worry list plus situations that are focuses of worry. Additionally, six items bearing on this identified worry are flushed out in detail. However, subjective self-reporting (especially over the phone) may create inherent biases and doubts about its generalizability to the real world. The authors do address this last concern. Ironically, there are still no results for test–retest reliability, no replication to date of the findings, and an ongoing need for a GAD specific rating scale.

The final scale is the seven-item brief self-report anxiety scale called the GAD-7 (Spitzer, Kroenke, Williams, & Lowe, 2006). Of the three inventories just discussed, the GAD-7 appears to have the most reliability and validity. The scale has excellent internal consistency and good test–retest reliability. The goal of the GAD-7 is to identify possible cases of GAD and assess the severity of the disorder. Given the high prevalence rates of GAD in general medical practices, a quick clinical measure for GAD is an imperative. The scores for the inventory are 5 (*mild*), 10 (*moderate*), and 15 (*severe*). A cutoff point for GAD is 10 or above. The main strengths of the GAD-7 are its generalizability to primary care, it being validated in a large sample, and the fact that it is brief and efficient in purpose. It may once again prove helpful in a busy clinical setting – medical and mental. Similar to any relatively new instrument, the GAD-7 must be used more extensively, with clinicians and patients providing increased feedback. The researchers also feel that it may need further evaluation to confirm probable diagnoses, given that the type of study was cross-sectional and it only focused on one diagnosis, namely GAD. I do not see the focus on one diagnosis as being a limitation. Further research to examine changes in severity of anxiety over time seems a more legitimate concern, and potential limitation of the instrument. Overall, this is a simple, but impressive self-report inventory for GAD.

Conclusion

In this chapter many different assessment tools were broached in depth to aid the clinician with the challenges in identifying and diagnosing GAD. Clinical interviews help build rapport and establish the therapeutic alliance, but structured interviews, in particular, and self-report inventories are significantly more effective in pinpointing

the diagnosis and comorbid conditions. Even though I favor giving one structured interview (preferably the ADIS-IV) and several self-report inventories (DASS, PSWQ, GADQ-IV, SWL), which includes at least one that measures an index of quality of life; other practitioners may have different preferences.

However, one must be careful as a clinician – there is still an inherent danger that by choosing measures with poor psychometric properties and minimizing formalized assessment, ongoing treatment will be seriously compromised. Some will argue that, either way, the diagnostic criteria of the current *DSM-IV-TR* does not capture what happens in real life clinical settings with patients, or that these same patients being seen in actual practice are more severely ill than research subjects. However true these assertions may be, in part by using multiple measures that target not just worry and anxiety, but broader areas of functioning, this can enhance the prospects that a more heterogeneous patient population can be identified with greater accuracy. Finally, treatments can start to fulfill their promise to chronically anxious patients, guided by more clearly defined assessment strategies, with increased diagnostic precision and ideally clinical acumen to attempt the daunting task of maximizing clinical outcomes.

Conceptual models that form the theoretical underpinnings of treatment “protocols” (a term used loosely in this text), can now be broached with greater breadth and specificity to demonstrate how theory clearly impacts clinical practice. Next, we turn to these important conceptual contributions that have deepened our understanding of the pathogenesis of GAD, and continue to play a vital role in informing treatment choices.