A Treatment Algorithm for the Management of Anxiety in Primary Care Practice

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Patients frequently present to primary care physicians with somatic symptoms that mask an underlying anxiety disorder. As a result, unnecessary diagnostic tests are ordered, and inappropriate medications are prescribed. Psychiatrists may help improve their primary care colleagues' ability to identify and treat these anxiety disorders. This paper reviews the adverse effects of untreated anxiety in managed care settings and outlines a treatment algorithm that psychiatrists may wish to use to assist primary care physicians in the cost-efficient, pharmacologic treatment of anxiety disorders in their patients.
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Primary care physicians are all too familiar with patients with multiple, unexplained somatic symptoms who show up repeatedly in their offices or frequently phone them. No matter what treatment strategies are devised for these patients, they do not seem to get better and remain a continuing source of frustration for the physicians who must deal with them on a regular basis. Needless to say, the patients themselves are also frustrated because their frequent calls or visits to their primary care physicians fail to resolve bothersome somatic symptoms.

Studies have shown that patients with multiple somatic complaints who are unresponsive to treatment are often experiencing an unrecognized, persistent, or chronic anxiety disorder. Fortunately, the appropriate diagnosis and treatment of the anxiety disorder not only relieves patients' anxiety symptoms but also usually ends their somatic symptoms. Early recognition of an anxiety disorder also prevents unnecessary and expensive diagnostic testing for physical causes as the physician searches for an explanation for these somatic symptoms.

This paper begins by presenting an overview of the epidemiology and cost of persistent anxiety. It then describes methods for screening and diagnosing acute and persistent anxiety and panic disorder. The final section presents a treatment algorithm for anxiety that psychiatrists may wish to use to teach primary care physicians how to select an appropriate medication regime for patients who have an anxiety disorder.

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EPIDEMIOLOGY

The recent National Comorbidity Survey (NCS)[1] suggested that psychiatric disorders in the United States are even more prevalent than reported by previous studies, such as the Epidemiologic Catchment Area (ECA) study.[2] The NCS sampled 8098 noninstitutionalized persons between the ages of 15 and 54 years. The survey found that the lifetime prevalence of any psychiatric disorder (mood disorder, anxiety disorder, substance use disorder, antisocial personality or nonmood psychosis) was 48%.[1] This is higher than in the ECA study that reported a lifetime prevalence of 32%.[2] The 12-month prevalence for all psychiatric disorders combined was 29.5% in the NCS.[1]

Anxiety disorders were one of the most commonly reported psychiatric conditions with a lifetime prevalence of approximately 25%, followed by mood disorders at 19%. The NCS data demonstrate that psychiatric morbidity is more extensive than was previously recognized by the ECA study.[2] In addition, patients with generalized anxiety disorder (GAD) tend to experience worse social and physical functioning than do patients with common medical disorders such as diabetes and coronary heart disease.[3] Because primary care physicians rarely use the DSM-IV, we refer to anxiety as either persistent (e.g., generalized anxiety disorder) or acute.

OVERUTILIZATION OF HEALTH CARE SERVICES

A link between overutilization of health care services and underlying psychiatric disorders was clearly demonstrated in the landmark study at the Group Health

Cooperative of Puget Sound, a large staff model health maintenance organization (HMO) serving more than 300,000 individuals.[4] The study calculated the percentage of patients who suffered from anxiety disorders among 767 high utilizers, which the study defined as the top 10% of ambulatory medical service users. Persistent anxiety (GAD) emerged as one of the most common causes of distress in 119 high utilizer patients who underwent specific diagnostic testing.

Among distressed high utilizers, 22% currently had GAD and 40% had a lifetime history of GAD. In addition, 12% currently had panic disorder, and 22% had a lifetime history of panic disorder. Furthermore, 20% had either a current somatization disorder or a lifetime history of somatization disorder.

HIGH UTILIZERS

Every primary care practice has a core group of patients—often referred to as high utilizers—who put tremendous strain on available health care resources within that primary care practice. Increasingly, individual primary care physicians and primary care group practices are becoming "capitated," a situation in which the physician or practice receives each month a fixed amount of funds for each patient enrolled in the practice. From the funds received, the physicians must deliver or coordinate all professional services. In those practices where the majority of patients are capitated, high utilizers may adversely affect the primary care physician's net income if frequent tests are ordered or if numerous specialty consultations are requested.

These patients tend to share certain characteristics. Their pattern of utilization involves multiple office visits and/or numerous phone calls. They have multiple physical complaints with no identifiable organic causes; hence, they are characterized by their primary care physicians as somatizers.

Somatizing patients, who are continually searching for "relief," can also be a source of anger, frustration, and aversion for primary care physicians. In a study of physician attitudes toward the top 10% of medical service utilizers, a substantial portion (37%) were viewed as "frustrating" by their physicians.[5] Furthermore, a Group Health Cooperative study[6] illustrated the striking imbalance in usage of medical services between two groups of patients: the highest 10% of health care utilizers versus the lowest 50% of health care utilizers. Resource consumption among the high utilizers (top 10%) was drastically higher than that of the low utilizers (lowest 50%). The high utilizers consumed 29% of primary care visits, 52% of outpatient specialty visits, and 48% of hospital days. In contrast, the low utilizers accounted for only 18% of primary care visits, 7% of outpatient specialty visits, and 9% of hospital days.

In summary, patients with persistent anxiety make up a large proportion of the high utilizers; for example, 40% of the distressed high utilizers had a lifetime history of GAD.[4] Thus, patients with a history of persistent anxiety consume a particularly high level of medical resources.

UNTREATED ANXIETY IN MANAGED CARE TREATMENT SETTINGS

Fifer et al.[7] conducted a prospective assessment of untreated anxiety symptoms and disorders among primary care patients in an HMO. The study involved 6307 adult patients who completed a screening questionnaire in the waiting room. Of those eligible for further evaluation, 33% reported anxiety levels at or above the screening cutoff point, and 10% had unrecognized and untreated symptoms of persistent anxiety. Patients with untreated persistent anxiety, compared with patients who were not anxious, reported significantly worse functioning on both physical and emotional measures. The reduced functioning levels were comparable to those of patients with chronic physical diseases, such as diabetes and congestive heart failure. Thus, patients with untreated persistent anxiety need treatment as much as patients with other chronic medical conditions.

The ability of primary care physicians to recognize anxiety and depression is directly related to whether their patients present with somatic or psychological symptoms. Unfortunately, the presenting complaint of a vast majority of anxious or depressed patients is not "I am really anxious and worried all the time" or "I am really, really depressed" but is a physical or somatic symptom, such as headache, abdominal pain, chest pain, or chronic fatigue. This is partly because a social stigma is attached to psychiatric conditions, and people are reluctant, either consciously or unconsciously, to discuss psychological symptoms with their primary care physician. As a result, they are more comfortable focusing on physical symptoms rather than on psychological symptoms.

A British study by Bridges and Goldberg[8] screened 2500 patients in a primary care setting and identified 500 patients with physical and/or psychiatric illnesses. Among these 500 patients, 84% of patients with anxiety and/or depression presented with somatic complaints, whereas only 17% of the patients with anxiety and/or depression presented with psychological complaints. In patients who presented with psychological symptoms, primary care physicians diagnosed psychiatric disorders correctly in 94%, but in patients who presented with somatic complaints, only 50% were correctly diagnosed. These findings were supported by a study conducted in the United States[9] in which family physicians correctly diagnosed major depression or an anxiety disorder in 77% of 685 patients who presented with psychological complaints but in only 22% with somatic symptoms.

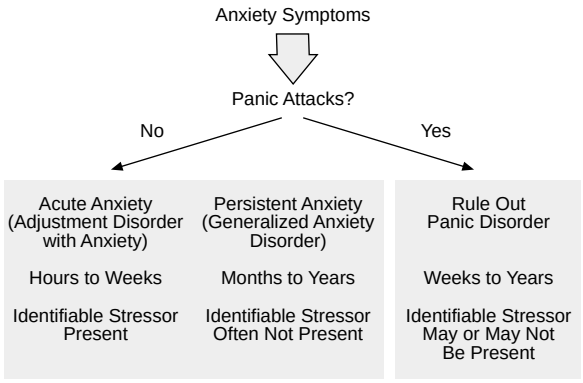
Kroenke et al.[10] demonstrated a relationship between physical and psychiatric disorders in a large study of 1000 adult primary care patients. After careful screening for mental disorders, Kroenke and colleagues observed a strong correlation between the number of physical complaints that patients had and the likelihood that they had a concomitant psychiatric disorder, such as an anxiety disorder. The probability of an anxiety disorder increased dramatically with increasing numbers of physical symptoms. More specifically, the presence of an anxiety disorder in patients with 0 to 1 physical symptoms was only 1% but climbed rapidly as the number of symptoms increased. For instance, 7% of patients with 2 to 3 physical symptoms had an anxiety disorder, 13% of those with 4 to 5 physical symptoms, 30% of those with 6 to 8 symptoms, and 48% of patients with 9 or more physical symptoms. The study also found that the number of physical symptoms was a powerful predictor of the patient's functional status, with an increased number of physical symptoms being associated with a worse level of functioning.

Furthermore, Kroenke et al.[10] reported that the prevalence of an anxiety disorder was associated with certain presenting somatic symptoms. The prevalence of an anxiety disorder was 33% for chest pain, 26% for fatigue, 28% for headache, 35% for insomnia, and 31% for abdominal pain. Therefore, certain physical symptoms are potential markers for anxiety disorders; many of the patients who complain about these symptoms actually suffer from a hidden anxiety disorder.

SCREENING FOR ANXIETY DISORDERS IN PRIMARY CARE SETTINGS

Primary care physicians are increasingly aware that an underlying anxiety or mood disorder can cause patients' unexplained somatic symptoms. As a result, there is a growing interest among family physicians in the need to screen patients for possible mental disorders. New diagnostic instruments, such as the Primary Care Evaluation of Mental Disorders (PRIME-MD),[11] have been developed specifically to assist primary care physicians. A study by Leon and colleagues[12] involved the administration of a screening instrument to 937 primary care patients, followed by an independent diagnostic assessment of 388 of these patients. The study showed that the prevalence for obsessive-compulsive disorder was 2%, GAD was 3%, alcohol abuse or dependence was 3%, panic disorder was 6%, and a major mood disorder was 14%. The study also demonstrated that the prevalence of any of the five disorders was higher in patients returning for follow-up care (28%) than in those either presenting with a new illness (22%) or requesting a routine physical examination (12%). The prevalence of the five disorders was also higher in patients with a chronic medical condition (26%) than in those without (17%).

Figure 1. Diagnostic Algorithm for Categorizing Anxiety in Primary Care Practice



When should the screening take place? Screening for anxiety disorders is easily individualized to suit different practice patterns. Screening can occur before or during the examination by the physician extender or physician. For example, the receptionist in the waiting room can ask the patient to complete a short, self-administered questionnaire. In most cases, the physicians may want to use a combination of a written well-being screening tool and informal interviewing that rates the severity of the patient's anxiety or depression, since these disorders are so common in primary care practice. The self-administered questionnaire could be followed by written or verbal questions administered by a physician extender or by the physician during the actual patient examination.

The Well-Being Life Chart (WBLC), developed by Jan Fawcett, M.D., and John Zajecka, M.D., see pages 12–13,[13] is an example of a new, efficient, easy-to-use screening and assessment tool for possible anxiety and depression in patients in a primary care practice. It is a single-page, self-administered questionnaire that is fast and convenient for both patient and physician. The Well-Being Life Chart consists of a checklist for various events and symptoms that have taken place over the previous 4 weeks. The checklist includes the use of medications, alcohol or tobacco, various life events that have influenced the patient's well-being, and a variety of symptoms divided into general, eyes and ears, musculoskeletal/extremity, cardiovascular, gastrointestinal, and genitourinary. The Chart enables primary care physicians to screen patients for psychiatric disorders using a format that fits easily into the work flow of a primary care office. The Chart is also an effective tool for tracking patient improvement over the course of therapy.

DIAGNOSIS OF ANXIETY DISORDERS

When diagnosing acute or persistent anxiety, primary care physicians should first rule out symptoms of a panic

Table 1. Recommended Pharmacologic Agents for Anxiety Disorders in Primary Care Settings

Anxiety Category	First-Line Pharmacologic Agent
Acute anxiety	Benzodiazepine
Persistent anxiety	Buspirone
Panic disorder	Antidepressant

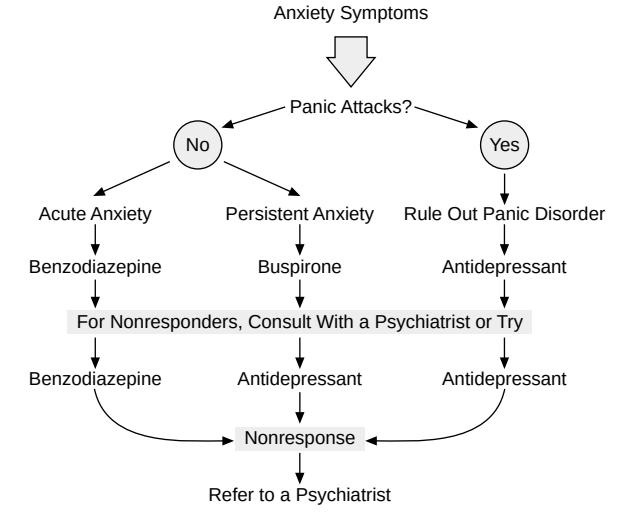
attack (see Figure 1). Patients who experience a panic attack typically describe a sudden, intense fear or discomfort and report that they thought they were about to die, lose control, have a heart attack, have a stroke, or "go crazy." If an anxious patient has not experienced panic attacks, thus ruling out the possibility of a panic disorder, the primary care physician should next determine the duration of anxiety symptoms. In acute anxiety (e.g., adjustment disorder with anxiety), the anxiety usually lasts hours to weeks and is generally triggered by a stressor, whereas persistent anxiety (GAD) lasts months to years and is often not triggered by an identifiable stressor. It is important for primary care physicians to differentiate persistent anxiety from acute anxiety and panic disorder because treatment differs.

TREATMENT ALGORITHM

Primary care physicians are essential providers in the effective treatment of acute and persistent anxiety and panic disorder. Many patients avoid seeking help from psychiatrists, preferring to have anxiety symptoms managed by primary care physicians. As previously discussed, many patients focus on somatic complaints and are unaware that their symptoms are actually a result of an unrecognized anxiety disorder. The correct diagnosis of the general "category" of anxiety disorder—acute or persistent anxiety or panic disorder—helps avoid costly and unnecessary tests to rule out physiologic causes for the complaints. The choice of appropriate pharmacologic agents will also result in prompt and cost-effective treatment of the anxiety symptoms. It is important to reiterate that it is less important for primary care physicians to arrive at a specific DSM-IV diagnosis, than to recognize the general anxiety category upon which a pharmacologic treatment is based (see Table 1).

Primary care physicians should treat patients with acute anxiety with one of the benzodiazepines, the most widely prescribed drugs for the treatment of anxiety. For patients with persistent anxiety, primary care physicians should prescribe buspirone as the agent of choice because of its excellent benefit/risk ratio, lack of cognitive and psychomotor effects, and absence of withdrawal symptoms.[14] Because buspirone is chemically and pharmacologically distinct from the benzodiazepines, it is also important for primary care physicians to inform their patients that buspirone works differently than benzodiazepines, is similar to newer antidepressants that have an effect on serotonin,[15]

Figure 2. Treatment Algorithm for the Management of Anxiety in Primary Care Practice



and has an onset of action that is gradual and progressive. Finally, we recommend that primary care physicians use antidepressants to treat patients with panic disorder.[16]

The treatment algorithm shown in Figure 2 guides primary care physicians in the use of four therapeutic classes of medications for the treatment of acute and persistent anxiety and panic disorder. Although other excellent algorithms have been published,[17, 18] we felt that primary care physicians desired a more simplified treatment approach.

For acute anxiety, with or without panic attacks, we encourage primary care physicians to use a benzodiazepine such as lorazepam, oxazepam, or alprazolam as the treatment of choice. Psychiatrists generally prefer lorazepam because of its short-to-intermediate half-life (approximately 12 hours), lack of active metabolites, metabolism unaffected by liver disease, availability of a parenteral form that has excellent bioavailability, and lower potential for abuse. For these reasons, we encourage primary care physicians to use lorazepam first. For older patients, primary care physicians should consider oxazepam because of its more gradual onset of action and decreased likelihood to make the patient feel "spacey." We discourage the use of alprazolam because of its high potential for abuse and dependence, the need for frequent dosing, and problems with discontinuation. Patients are often unwilling to stop alprazolam, and withdrawal reactions can be severe (e.g., seizures) in patients who have been using high doses for long periods of time.

For persistent anxiety without panic attacks, we recommend buspirone. Buspirone does not impair memory or motor coordination, is not associated with abuse or dependence, is not cross-tolerant with alcohol, and does not produce a withdrawal reaction. In addition, buspirone has a progressive onset of action and produces few adverse drug reactions when combined with other agents. It is advisable

Table 2. The Phases of Treatment for Persistent Anxiety

Phase	Treatment Duration
Acute	1–2 months
Continuation	3–6 months
Maintenance	7–12 months

not to use buspirone in patients who have used a benzodiazepine within 30 days because it may have decreased efficacy in some cases.[19] If the patient does not respond to buspirone, we encourage the physician to consider nefazodone, a 5-HT_2 antagonist, or one of the serotonin selective reuptake inhibitors (SSRIs).

Because of the long-term nature of persistent anxiety, similar to major depressive disorder, drug treatment must also be long-term and perhaps lifelong. About 25% of patients with persistent anxiety (GAD) relapse in the first month after discontinuation of therapy, and 60% to 80% relapse over the course of the next year. Patients treated for 6 months or longer have a lower relapse rate than patients treated for fewer than 6 months.[19] As a result, we recommend that treatment of persistent anxiety should last at least 6 months and perhaps longer to decrease the likelihood of relapse or recurrence (see Table 2).

For panic disorder, the SSRIs are generally preferred. Although paroxetine is the only SSRI currently approved by the Food and Drug Administration (FDA) to treat panic disorder,[20] other SSRIs commonly used in primary care, such as sertraline[21] and fluoxetine,[22] are also effective. With regard to dosing, primary care physicians need to be advised to "start low and go slow" to avoid precipitating a panic attack.[23] If the patient does not respond to an SSRI, then nefazodone, a 5-HT_2 antagonist that has been found to be particularly effective in the treatment of depression complicated by agitation and anxiety, may be used.[24]

SUMMARY

In closing, it is important to recognize that patients with anxiety often present with somatic symptoms. Individuals with these somatic symptoms may actually be suffering from a hidden anxiety disorder. The prompt diagnosis and treatment of the anxiety disorder helps the primary care physician avoid unnecessary diagnostic tests and inappropriate medications. Somatic symptoms caused by an anxiety disorder can be treated more effectively with an anxiolytic agent. It is important for psychiatrists to educate primary care physicians to differentiate among acute and persistent anxiety and panic disorder because of the different treatment approaches. For acute anxiety, which lasts only hours to weeks, the short- to intermediate-acting benzodiazepines are recommended. For persistent anxiety, which lasts months to years, buspirone is the agent of choice. For panic disorder, an antidepressant, such as an SSRI or nefazodone, is recommended.

Drug names: alprazolam (Xanax), buspirone (Buspar), fluoxetine (Prozac), lorazepam (Ativan and others), nefazodone (Serzone), oxazepam (Serax and others), paroxetine (Paxil), sertraline (Zoloft).

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