

# Anxiety Disorders in Women

*Post-traumatic stress disorder, obsessive-compulsive disorder, social phobia, specific phobia*

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**A**nxiety disorders are more common in women than they are in men, and they may manifest differently (Table 1). In the October 2001 issue of *Women's Health in Primary Care*, we examined medical mimics of anxiety disorders and two of the specific anxiety disorders outlined in the *Diagnostic and Statistical Manual of Mental Disorders*,

*Fourth Edition (DSM-IV)*: generalized anxiety disorder and panic disorder. Here, we will discuss diagnostic criteria, epidemiology, and treatment (Table 2) for the remaining specific anxiety disorders described in the *DSM-IV*: post-traumatic stress disorder (PTSD), obsessive-compulsive disorder (OCD), social phobia, and specific phobias.

## POST-TRAUMATIC STRESS DISORDER

### DEFINITION AND CRITERIA

PTSD requires that the patient experience or witness a traumatic event and have a response that involves intense fear, helplessness, or horror. Symptoms of PTSD fall into three categories:

- ◆ Reexperiencing the traumatic event (intrusive memories, dreams or nightmares, flashbacks).

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**ABSTRACT:** About 10% to 12% of women have a lifetime history of post-traumatic stress disorder. Treatment involves education, psychosocial support, and pharmacologic therapy, such as selective serotonin reuptake inhibitors (SSRIs). As compared with men, women develop obsessive-compulsive disorder later in life and have a more severe course. Treatment options include SSRIs, clomipramine, and psychotherapy. The essential feature of social phobia is a marked and persistent fear of social or performance situations in which embarrassment may occur. It may be treated with SSRIs, cognitive behavior therapy, or both. In specific phobia, fear and intense anxiety are consistently provoked by a certain situation or object. Specific phobia may be managed with pharmaceutical agents, including propranolol, and, if severe, with psychotherapy. (*Women Health Primary Care* 2001;4(11):691-698)

- ◆ Avoidance or emotional numbing (avoiding reminders, detachment or estrangement, loss of interest, psychogenic amnesia, restricted affect).
- ◆ Increased arousal (insomnia, irritability or anger, difficulty concentrating, easily startled).<sup>1</sup>

Following a traumatic event, many people experience anxiety, flashbacks, disturbed sleep, and irri-

tability. If these symptoms abate within four weeks' time, the appropriate diagnosis is acute stress disorder. If symptoms persist, however, the clinician should strongly consider the diagnosis of PTSD.

Traumatic events include rape, natural disaster, terrorist attacks, sexual molestation, physical assault, combat, displacement as a refugee, motor vehicle accidents, death of a loved one, and even diagnosis with a life-threatening illness. The death of a loved one can be especially traumatic.<sup>2</sup> Although rape or combat is more likely to precipitate PTSD, more cases can be attributed to the sudden and unexpected death of a loved one because this experience is more common.

The severity and duration of the trauma, as well as the vulnerability of the individual, influence whether PTSD will develop. Traumatic experiences have a cumulative effect, and it is believed that most people will develop PTSD if exposed to enough of them. The trauma most strongly associated with PTSD in women is rape or sexual molestation; in men it is combat exposure.<sup>3</sup>

Victims of repetitive abuse during childhood or of ongoing trauma make up a subgroup of patients with PTSD who have a condition known as *complex PTSD*. This condition is not a *DSM-IV* diagnosis but a collection of symptoms that includes standard PTSD criteria plus somatization, character pathology, affective symptoms, and dissociative symptoms.<sup>4</sup> This severe form of PTSD is frequently seen in primary care, especially in somatizing patients.<sup>5</sup>

A study performed after the Oklahoma City bombing found that although all victims had symptoms of reexperiencing and increased arousal in the first two weeks after the event, the more unusual symptoms of avoidance and numbing were strongly correlated with the eventual development of PTSD (100% sensitivity and 94% specificity).<sup>6</sup> Asking about these symptoms allows primary care providers to recognize patients who are at high risk, especially when patients are seen shortly after the traumatic event.<sup>6</sup>

EPIDEMIOLOGY AND IMPACT ON SOCIETY

Women are twice as likely as men are to develop PTSD. Other risk factors include comorbid psychiatric diagnosis, previous trauma, and an unsupportive recovery environment. In a community study, 9.2% of women met criteria for PTSD after exposure to any trauma.<sup>2</sup> More specifically, PTSD developed in 20.9% of those who were assaulted, 14.3% of those who experienced the sudden and unexpected death of a loved one, and 2.2% of those who learned about traumatic events happening to others.<sup>2</sup>

The median time to remission for a single episode is three years with treatment and longer than five years without.<sup>3</sup> The time to remission has an enormous impact on society when one considers that

10% to 12% of women have a lifetime history of PTSD.<sup>3,7,8</sup> One study estimates that patients with PTSD had cut back an average of 2.8 workdays the previous month, leading to an estimated \$3 billion annual productivity loss.<sup>9</sup> Despite these alarming statistics, PTSD is under-recognized. According to the National Comorbidity Survey, approximately 60% of people with

cially common comorbid diagnosis among women who have PTSD. Clinicians should note that PTSD has a stronger association with suicide than do any of the other anxiety disorders. Persons who have PTSD are six times more likely than the general population to attempt suicide.<sup>11</sup>

TREATMENT

Primary care clinicians can provide psychosocial support during the first several weeks after a trauma.<sup>12</sup> One or two visits may be enough to improve feelings of safety. Patients should be encouraged to talk about their feelings with trusted family and friends. The clinician should also make the patient aware that flashbacks and feelings of anxiety and depression are a normal reaction immediately post-trauma, but such feelings should not persist. If a patient does develop PTSD, several management options are available.

Treatment involves three parts: education, psychosocial support (including psychotherapy), and pharmacologic therapy. Psychotherapy, particularly cognitive behavior therapy, has been widely studied and has been found to be effective.<sup>13</sup>

Selective serotonin reuptake inhibitors (SSRIs) are the first-line medication treatment. The starting dose for PTSD should be half that used for treating depression, and it should be increased slowly. If the therapy is successful, medication should be continued for at least one year.<sup>14</sup>

Benzodiazepines are not beneficial in the treatment of PTSD, and some evidence suggests that these agents may have a negative impact.<sup>14</sup> Sleep disturbance, especially due to nightmares, may be particularly distressing. Trazodone, although it is technically an antidepressant, may be useful as a non-benzodiazepine hypnotic at lower doses (25 to 100 mg).

Table 1. Gender differences in anxiety disorders

<p><b>Post-traumatic stress disorder</b></p> <ul style="list-style-type: none"> <li>◆ Women are twice as likely as men to develop post-traumatic stress disorder.</li> <li>◆ The trauma most strongly associated with post-traumatic stress disorder in women is rape or sexual molestation; in men it is combat exposure. However, the sudden death of a loved one is a more frequent cause of the disorder.</li> </ul>
<p><b>Obsessive-compulsive disorder</b></p> <ul style="list-style-type: none"> <li>◆ Women develop obsessive-compulsive disorder later in life, have more comorbid depression, and have a more severe course when compared with men.</li> </ul>
<p><b>Social phobia (social anxiety disorder)</b></p> <ul style="list-style-type: none"> <li>◆ Women are about twice as likely as men to have social phobia.</li> </ul>
<p><b>Specific phobia</b></p> <ul style="list-style-type: none"> <li>◆ Community samples have found a one-month prevalence of 9% in women and 4% in men.</li> </ul>

PTSD go untreated. In this study, the primary reason that people with PTSD did not seek treatment was that they did not think they had a problem.<sup>10</sup>

Women who have PTSD are at increased risk of developing mood, anxiety, and substance abuse disorders. Interestingly, this risk disappears when PTSD is successfully treated.<sup>10</sup> Depression is an espe-

**OBSESSIVE-COMPULSIVE DISORDER**

**DEFINITION AND CRITERIA**

Obsessions are defined as “persistent ideas, thoughts, impulses, or images that are experienced as intrusive and inappropriate.” Patients with OCD recognize these distressing experiences as coming from their own brains. These obsessions cause significant anxiety, and the patient will attempt to ignore, suppress, neutralize, or undo these thoughts with some other thought or action. Conversely, compulsions reduce anxiety. They are repetitive behaviors or mental acts that are aimed at preventing or alleviating the anxiety and distress that are caused by the obsessions. Typical compulsions include: hand washing, checking, counting, and repeating words or phrases. To reach the *DSM-IV* criteria for OCD, these obsessions and compulsions must be unreasonable or excessive, cause marked distress or functional impairment, and interfere with normal activity.<sup>1</sup>

In primary care, OCD patients may present directly with their obsessions or compulsions. However, the disorder may also manifest indirectly through the consequences of these rituals (eg, “rashes,” over-concern about contamination, loss of work).

It is important to distinguish OCD from normal behavior. Many people may “obsess” or worry about things from time to time in their lives, or they may be very neat and consider themselves “compulsive.” Symptoms such as these are within the normal range of behavior, whereas symptoms of OCD are pervasive and lead to dysfunction. It is important to remember that there is often shame and secrecy associated with OCD, and the clinician should have a high index of suspicion and directly inquire about its symptoms.

When considering the diagnosis of OCD, it is important to con-

sider other disorders with similar symptoms. People with generalized anxiety disorder are typically “worriers.” They may describe themselves as “obsessing” or as being “compulsive,” but their symptoms are not of the magnitude to be OCD. Women with PTSD may obsess about past injury or trauma and compulsively check their houses for safety. These symptoms revolve around the past trauma, whereas the symptoms in OCD do not involve a specific triggering event. Obsessive-compulsive personality disorder is distinguished from OCD in that the rigid lifestyle does not cause distress for the patient, but it causes much distress in the people around her.

course.<sup>17,18</sup> Genetic factors play a significant role in OCD, especially in cases with early onset.<sup>19</sup>

OCD frequently co-occurs with other psychiatric disorders. It is particularly associated with major depression, which is comorbid in 33% to 75% of patients who have OCD.<sup>20,21</sup> This strong link between the two disorders, coupled with the secrecy surrounding OCD, reminds clinicians how important it is to look for OCD when diagnosing major depression.

Observation has shown an association between OCD and Tourette’s syndrome. About one half of people with Tourette’s syndrome have OCD, and about 10% of people with OCD have Tou-

**Table 2. Treatment options for anxiety disorders in women**

Condition	Psychotherapy	Pharmacotherapy
Post-traumatic stress disorder	Cognitive behavior therapy	Selective serotonin reuptake inhibitors
Obsessive-compulsive disorder	Cognitive behavior therapy	Selective serotonin reuptake inhibitors Clomipramine
Social phobia (social anxiety disorder)	Cognitive behavior therapy	Selective serotonin reuptake inhibitors Benzodiazepines (for short-term use)
Specific phobia	Systematic desensitization, systematic exposure, flooding, and modeling	β-Adrenergic blocking agents (eg, propranolol)

**EPIDEMIOLOGY**

The Epidemiologic Catchment Area Study found the prevalence of OCD to be approximately 1%. Reversing a previously held view, the study showed that women and men appear to be affected equally.<sup>15</sup> Further study has shown that, compared with men, women develop OCD later in life, have more comorbid depression, and have a more severe course. Women are more likely to develop trichotillomania (compulsive hair pulling) than men.<sup>16</sup> Like generalized anxiety disorder, OCD is usually lifelong and has a waxing and waning

rette’s.<sup>19</sup> This connection has been further studied in children. PAN-DAS (Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal infections) describes a subset of children who developed OCD and tics after streptococcal infection.<sup>22</sup> Further research is under way in this interesting area.

**TREATMENT**

SSRIs are the mainstay of pharmacotherapy for OCD, but the tricyclic antidepressant clomipramine is equally effective.<sup>23</sup> As with other anxiety disorders, the “start low,

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go slow” approach applies to treatment of OCD.

Psychotherapy, particularly cognitive behavior therapy, is at least as effective as pharmacotherapy.<sup>24</sup> Behavior therapy has virtually no side effects, and, when it is administered by a good psychotherapist, the therapeutic gains are maintained over long-term follow-up.<sup>25</sup> Frequently, however, patients are resistant to the idea of psychotherapy, so the best approach may be to suggest this treatment early and reinforce it as an option if medications alone are not adequately effective.

#### SOCIAL PHOBIA (SOCIAL ANXIETY DISORDER)

##### DEFINITION AND CRITERIA

The essential feature of social phobia is a marked and persistent fear of social or performance situations in which embarrassment may occur. Patients with this condition are afraid that others will judge them to be anxious, weak, “crazy,” or stupid. They may fear public speaking because of concern that others will notice their trembling hands or voice. They may experience extreme anxiety when conversing with others for fear that they will appear inarticulate. They may avoid eating, drinking, or writing in public for fear of being embarrassed by having others see their hands shake.

Patients who have social pho-

bia almost always experience symptoms of anxiety in the feared social situation. These symptoms include palpitations, tremors, sweating, gastrointestinal discomfort, diarrhea, muscle tension, blushing, and confusion. In severe cases, these symptoms may meet the criteria for a panic attack. Blushing, which is less common in other anxiety disorders, is typical of social phobia.

##### EPIDEMIOLOGY

Community-based and epidemiologic studies have reported a lifetime prevalence of social phobia ranging from 3% to 13%.<sup>26</sup> In one study of primary care patients, the one-month prevalence was 7%.<sup>27</sup> The reported prevalence may vary depending on the threshold used to determine distress or impairment and the number of types of specific social situations surveyed. In the general population, most people with social phobia fear public speaking; less than half fear speaking to strangers or meeting new people. Other performance fears, such as those that are associated with eating, drinking, writing in public, or using a public restroom, are less common.

##### TREATMENT

Although women are about twice as likely to have social phobia as men are, men are more likely to seek treatment.<sup>28</sup> One might spec-

ulate that as more women enter the workforce and assume performance roles, they will increasingly find that social phobia symptoms interfere with their career success, and they will seek treatment at higher rates.

SSRIs have become the medication treatment of choice for social phobia. These medications have a long onset of action, and they may increase anxiety symptoms, especially during the initial treatment period. Benzodiazepines are also effective, but, because patients may become dependent on them, long-term use is reserved for refractory cases. Short-term benzodiazepine use in the initial treatment period can be useful to relieve the increased anxiety associated with beginning an SSRI. Monoamine oxidase inhibitors (MAOIs) remain highly effective alternatives to SSRIs. However, MAOIs require dietary and other restrictions that limit their use.

Evidence does not support the use of buspirone as monotherapy,<sup>29</sup> although it is used so clinically. Buspirone may be used to augment an SSRI.<sup>30</sup>

Like other anxiety disorders, social phobia is effectively treated with cognitive behavior therapy. Although combinations of psychotherapy and medications have not been studied vigorously, most clinicians believe that such combinations are particularly effective in patients with social phobia, given the condition’s chronic course and significant morbidity.

#### SPECIFIC PHOBIA

##### DEFINITION AND CRITERIA

The essential feature of specific phobia is fear and intense anxiety—including panic attacks—that are consistently provoked by a specific situation or object. The *DSM-IV* divides specific phobia into four types: animal (eg, spiders, snakes, dogs), natural environment (eg, storms, heights, water), the blood-

injection-injury type (eg, medical or dental procedures), and situational (eg, elevators, flying, public transportation).<sup>1</sup>

This diagnosis is only appropriate if symptoms cause marked distress or significant social or occupational dysfunction. In primary care, the patient who has specific phobia may present with extreme fear and subsequent avoidance of a medical procedure (eg, blood collection, anesthesia) or extreme fear that interferes with work (eg, avoidance of flying or elevators).

Patients who have the blood-injection-injury type specific phobia may experience a characteristic vasovagal response up to 75% of the time, usually in the doctor's office. This type of phobia can severely limit access to health care because people with it may avoid going to see their clinicians.

#### EPIDEMIOLOGY

Most phobias begin in childhood or adolescence, and the course is usually hard to predict. Phobias are common in the general population, but few persons have symptoms in proportions significant enough to meet criteria for specific phobia. Community samples have found a one-month prevalence of 9% in women and 4% in men.<sup>31</sup>

In a study of the general population, Bienvenu and Eaton<sup>32</sup> found that the lifetime prevalence of phobias of blood, injections, or dentists was 3.5%, with a median age of onset of 5.5 years. Almost 80% of persons with the condition had experienced symptoms within the past six months. Although over half had told a clinician or other health care professional of their phobias, none had sought mental health treatment for them.

Medical phobias were more common in women and in people with less education. Persons with phobias had four to eight times the expected lifetime prevalence of other psychiatric conditions, such

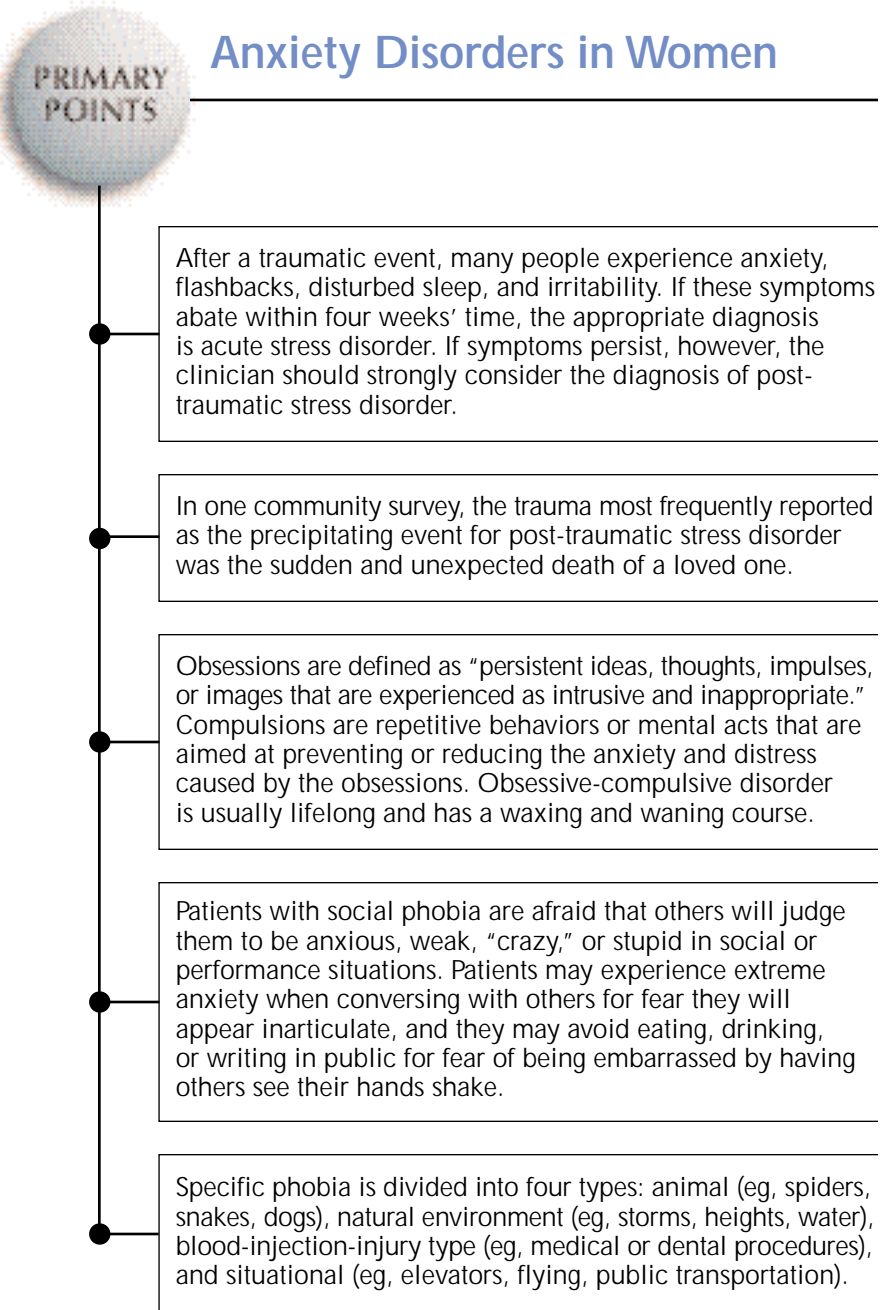
as major depression, OCD, panic disorder, agoraphobia, social phobia, and other simple phobias.<sup>31</sup>

#### TREATMENT

Specific phobias were an early clinical focus of behavior therapy research, and these techniques are by far the most studied treatment. Although they are extremely common, specific phobias are often not impairing enough for persons to seek treatment. Many persons are

able to adapt their lifestyles in order to avoid contact with the feared stimulus.

The peripheral symptoms of sweating, increased heart rate, and tremor that are associated with specific phobias (such as fear of public speaking) respond moderately well to  $\beta$ -adrenergic receptor antagonists. Agents with a short half-life (eg, propranolol) are effective for presentations and performances. Note, though, that while



propranolol (10 to 60 mg per dose) does block the physiologic symptoms of excessive autonomic arousal,<sup>33</sup> it does not address the patient's fear.

Musicians have reported using  $\beta$ -adrenergic blocking agents without medical supervision.<sup>34</sup> Because  $\beta$ -adrenergic blocking agents may have potential adverse effects and produce an unpredictable response, patients should be strongly encouraged to discuss such use with their clinicians and to test their reaction to the agents before taking them for an event or performance.

If the situations associated with specific phobias become debilitating or severe enough, then psychotherapy is indicated. Such therapy includes systematic desensitization, systematic exposure, flooding, and modeling.<sup>35</sup> With these techniques, the patient is gradually exposed to the anxiety-producing stimulus until it can be confronted with little or manageable anxiety. Such techniques have been effective in treating patients with needle phobias who require medical procedures and in patients with flying phobias who must travel by airplane.

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