Social Anxiety Disorder: An Unrecognized Problem in Primary Care

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Social anxiety disorder, or social phobia, is one of the most common mental disorders, yet it remains underrecognized and undertreated. Individuals with social anxiety disorder frequently have psychiatric comorbidity, including mood, anxiety, and substance abuse disorders, that can further impair a person’s ability to function. This article reviews the literature on social anxiety disorder and explores questions regarding its prevalence, rates of recognition and treatment, and natural history.

Unrecognized Problem in Primary Care

Until recently, social anxiety disorder, also known as social phobia, was thought to be a rare and usually mild mental disorder.1 A number of studies published in the last decade paint a dramatically different picture. Large epidemiologic studies have discovered that social anxiety disorder is one of the most common mental disorders.2 Individuals who have social anxiety disorder frequently have comorbid mood, anxiety, and substance abuse disorders, and the comorbid disorders usually start after the onset of social anxiety disorder.2 Because social anxiety disorder has an early age at onset (typically adolescence) and is chronic in nature, it has the potential to change an individual’s life trajectory by affecting educational, social, occupational, and physical functioning.1,4,5

What is the impact of having social anxiety disorder? How does it affect school and educational attainment, quality of life, risk of suicidal thoughts and behaviors, and rates of subsequent psychiatric and medical comorbidities? Does it affect occupational functioning, marital status, financial dependency, and health care utilization? How does the impact of social anxiety disorder compare with that of other Axis I disorders, such as major depression, that are described in the Diagnostic and Statistical Manual of Mental Disorders?6 What is the natural history of the disorder? Are individuals with social anxiety disorder currently being identified and treated? The goal of this article is to review the literature to answer these questions, which are especially relevant now that cognitive-behavioral therapy and pharmacotherapy have been shown to effectively treat social anxiety disorder.7–11 Even identification of individuals with social anxiety disorder has become easier with the availability of simple screening instruments.12

Before proceeding, it is necessary to mention several problems inherent in summarizing the existing epidemiologic literature on social anxiety disorder. First, the populations sampled varied from individuals in communities to clinical trial subjects. Primary care and mental health specialty clinics have also been studied. Another challenge is that most of the studies have combined generalized and nongeneralized social anxiety disorder subtypes. This is problematic because the nongeneralized subtype has consistently been found to be less severe and associated with less impairment. The most difficult challenge is teasing apart the impact of social anxiety disorder from the impact of psychiatric comorbidity. Some studies have focused only on patients with no psychiatric comorbidity. Others have attempted to adjust statistically for the impairment associated with these comorbidities. The fundamental problem is that the causal relationship between social anxiety disorder and the common psychiatric comorbidities is unknown. If social anxiety disorder causes a strong predisposition to subsequent psychiatric comorbidity, then the impact of the comorbidity should be included in the impact of social anxi-
society disorder. If they are totally independent, then the impact of the comorbidity should not be included.

**PREVALENCE RATES**

The first large epidemiologic study assessing social anxiety disorder, the Epidemiologic Catchment Area (ECA) study, found a 2.8% prevalence of lifetime disorder and a 1.5% prevalence of 6-month disorder. However, this study did not ask about many of the common triggers for social anxiety. The National Comorbidity Survey resolved this problem and found much higher rates of social anxiety disorder—approximately 13.3% lifetime prevalence and 7.9% 12-month prevalence. A European study observed people for 6 years and found a 3.8% prevalence. Weiller et al., who studied primary care patients in France as part of a larger World Health Organization (WHO) study on psychological problems and general health care, found a 1-month prevalence of 4.9% and a lifetime prevalence of 14.4%. Most studies have found a slightly higher rate of social anxiety disorder in females, with a ratio in the range of 1.1 to 1.5 females per 1 male. Kessler et al. focused on individuals identified in the National Comorbidity Survey as having social anxiety disorder. A total of 22.8% had public speaking fears only, which would probably be diagnosed according to DSM-IV as specific or nongeneralized social anxiety disorder. In adolescents, approximately one third of those with social anxiety disorder had the generalized type. Although there is significant variability in the prevalence rates across studies, they all support the conclusion that social anxiety disorder is one of the most common mental disorders.

**RATES OF RECOGNITION AND TREATMENT**

The ECA study found that only 5.4% of people with uncomplicated social anxiety disorder reported seeking care from a mental health practitioner during their lifetime. A higher but still low percentage, 19.6%, reported seeking any outpatient treatment for an emotional disorder. Even among those with psychiatric comorbidity, only 37.8% sought services for an emotional disorder. Wittchen and Beloch, who evaluated only individuals with pure social anxiety disorder (no psychiatric comorbidity), found that subjects had rarely seen a psychiatrist and that only 13.8% had seen a psychologist. When treatment occurred, it was usually by a primary care physician who prescribed anxiolytics or β-blockers. The retrospective National Comorbidity Survey had similar findings: only 4% of individuals with pure social anxiety disorder had received help compared with 19.1% of individuals with psychiatric comorbidity without panic attacks. Even among those who rated the impact of their social anxiety disorders on their lives as “a lot,” only 28.2% reported having had a medical visit and 11.4% reported taking medication. The prospective Zurich study found that only 21.4% of subjects had sought treatment for their social anxiety disorder. Rates of seeking help were much higher in individuals with psychiatric comorbidity. Unfortunately, even when the psychiatric comorbidity was identified, the social anxiety disorder was usually missed. In summary, there is a strong consensus that social anxiety disorder is one of the least commonly recognized and treated mental disorders. This is true in community, primary care, and mental health specialty settings.

**NATURAL HISTORY AND AGE AT ONSET**

The mean age at onset of social phobia has been found to vary from 14.6 years of age in the Zurich study to 16 years in the National Comorbidity Survey. The studies reviewed were all retrospective, requiring respondents to reflect on when their symptoms began. Many people remember a specific, extremely embarrassing situation, such as a public speaking class, when they became acutely aware of their problem. When prompted, they can usually remember many symptoms that occurred earlier, such as difficulty raising their hand and answering questions in elementary school. All of the studies found that social anxiety disorder tended to be chronic with periods of exacerbation. Most people identified in epidemiologic studies had suffered from social anxiety disorders for decades. One study, however, found that people who spontaneously improved rarely relapsed. Predictors of good outcome include onset after 11 years of age, no associated psychiatric comorbidity, and higher level of education. One study identified 26 years of age as the time when symptoms of social anxiety tended to be the most severe. Most studies found that patients’ symptoms were currently less severe than earlier in their lives. All of these studies confirm that social anxiety disorder typically starts in the early teens and becomes a chronic disorder lasting decades.

**RATES OF COMORBIDITY**

Do individuals with social anxiety disorder frequently have other Axis I psychiatric comorbidities? The ECA study found lifetime rates of psychiatric comorbidity among subjects with social anxiety disorder to be 69%. Weiller et al. studied primary care patients and found that among those with current social anxiety disorder, 33% met criteria for current major depression compared with only 10% of those without social anxiety disorder. The National Comorbidity Survey, which provides the most careful assessment of psychiatric comorbidity rates, found a lifetime comorbidity rate of 81% among those with social anxiety disorder. The odds of having any other mental disorder were 4.77 times higher for those with social anxiety disorder than for those without a psychiatric disorder. For indi-
viduals with social anxiety disorder, the odds ratio for panic disorder was 4.83; major depression, 3.65; alcohol dependence, 2.17; and any substance abuse, 2.0. Interestingly, the ECA study also found that individuals with social anxiety disorder had a mean of 1.27 chronic medical disorders compared with 0.87 for those without social anxiety disorder. Stein et al. found high rates of anxiety disorder, especially social anxiety disorder, in patients with Parkinson’s disease.

To understand the relationship between social anxiety disorder and comorbid psychiatric disorders, researchers have studied the temporal sequence of occurrence. The ECA study found that social anxiety disorder occurred first in 76.8% of people and that it occurred in the same year as another disorder in 7.2% of people. This was confirmed in the primary care study, in which social anxiety disorder came first in 75.9% of individuals and occurred simultaneously with another psychiatric disorder in 15.3% of individuals. A study focusing on adolescents and young adults found social anxiety disorder occurring first in 85.2% of those with substance abuse, 81.6% with major depression, and 64.4% with other anxiety disorders. The National Comorbidity Survey found a similar trend, except that simple phobias often preceded social anxiety disorder. In summary, comorbidity is the rule rather than the exception, and social anxiety disorder usually precedes the comorbidity.

**RELATIONSHIP BETWEEN SOCIAL ANXIETY DISORDER AND SUICIDE**

Is social anxiety disorder associated with an increased risk of suicide? The ECA study found that individuals with social anxiety disorder and comorbidity had much higher rates of suicide attempts, thoughts of death, and wanting to die than individuals without psychiatric disorders. Individuals with social anxiety disorder but no lifetime comorbidity did not have higher rates of suicide attempts but did have higher rates of the other suicide characteristics than individuals without psychiatric disorders. Weissler et al. found a similar pattern among primary care patients, with 41.3% of those with comorbid social phobia having a history of suicidal ideation compared with 8.5% of individuals with uncomplicated social anxiety disorder and 6.5% of controls. Individuals with social anxiety disorder and a history of psychiatric comorbidity had a higher lifetime rate of suicide attempts than individuals with no psychiatric disorder, even if those with social anxiety disorder currently had no comorbidity. Unfortunately, since the lifetime rates of comorbidity are so high in persons with social anxiety disorder, it is the exceptional patient who never experiences another Axis I psychiatric disorder.

The relationship between social anxiety disorder and suicide is similar to the association between panic disorder and suicide. As in persons with panic disorder, those with social anxiety disorder have a higher rate of suicide attempts, thoughts of death, wanting to die, and wanting to commit suicide than those without psychiatric disorders; however, the increased risk is generally confined to those with a lifetime history of psychiatric comorbidity, usually a mood or substance abuse disorder.

**IMPACT ON QUALITY OF LIFE**

Studies of the impact of social anxiety disorder on quality of life have employed either generic quality-of-life measures, such as the Short Form-36 (SF-36), that can be used to evaluate many disorders, or diseasespecific measures, such as the Liebowitz Self-Rated Disability Scale (LSRDS). Wittchen and Beloch used the SF-36 to compare 65 subjects with noncomorbid social anxiety disorder and a matched control group with herpes infection. Subjects with social anxiety disorder had lower scores on almost all subscales, with the most dramatic differences occurring in role limitations due to emotional problems and in social functioning, mental health, and vitality. A total of 23.1% of people with social anxiety disorder were severely impaired, and 24.6% were markedly impaired compared with only 4.5% of controls. The degree of impairment and reduced quality of life was directly related to the number of social anxiety disorder trigger situations. A study using the LSRDS found that individuals with social anxiety disorder felt the greatest restrictions in partner relationships, educational/career development, household work management, and family relationships. Jack et al. found that situational panic attacks and comorbid panic disorder led to even higher levels of distress, avoidance, and impaired functioning.

A common theme in the literature regarding social anxiety disorder is that severity of current disability is usually less than in the past. Wittchen and Beloch hypothesize that this reduced severity is due to adaptive avoidance behavior. Another explanation that we have explored is that the reduced severity might represent habituation in a naturalistic exposure paradigm in which individuals improve as they face triggers of their discomfort. A consistent limitation of all these studies is that people with social anxiety disorder often underestimate the degree of impairment they are experiencing when first diagnosed. Family members may be able to give collateral information to clarify this issue. Once patients receive effective treatment, they often gain insight into the many social situations they previously avoided but no longer even considered as possibilities. In summary, all studies to date have found an association between social anxiety disorder and lower quality of life. Quality of life in individuals with social anxiety disorder is the lowest in social and emotional domains, but is low in almost all other domains as well.
Educational Attainment

The impact of social anxiety disorder on educational attainment was specifically assessed in the Duke subset of the ECA study.\textsuperscript{1, 11} Compared with controls, individuals with social anxiety disorder have poorer grades (16.1% vs. 4.1%) and a higher probability of being expelled from school (15.6% vs. 6.6%) and running away from home (9.8% vs. 1.2%). Wittchen et al.\textsuperscript{19} found that adolescents with social anxiety disorder were more likely to miss days of school. It is not possible to determine from these studies if having social anxiety disorder leads to these school problems or if students with school avoidance are more likely to develop social anxiety disorder.

Occupational Functioning

The impact of social anxiety disorder on occupational functioning was best studied by Wittchen and Beloch.\textsuperscript{5} They administered the Work Productivity and Impairment questionnaire to a large number of self-selected people with social anxiety disorder. They found that 8.3% reported missing work in the previous week secondary to their social anxiety disorder and that a further 25.3% had substantially impaired work performance due to their social anxiety disorder symptoms. These findings are consistent with those of the ECA study,\textsuperscript{4} in which individuals with social anxiety disorder used 6.9 sick days in the prior 90 days compared with controls, who used 3.1 sick days. However, the extent of missed work days for people with social anxiety disorder appears to be less than for individuals with major depression.\textsuperscript{4} Because social anxiety disorder may limit occupational choices and career advancement, it is difficult to calculate the full impact of social anxiety on work functioning. Social anxiety disorder may also affect the ability to seek and maintain employment.\textsuperscript{5}

Financial Dependency

The ECA study\textsuperscript{1} found that among people with non-comorbid social anxiety disorder, 22.3% currently received welfare or disability payments compared with 10.6% with no mental disorder. Interestingly, 22.5% of people with social anxiety disorder and comorbidity received welfare or disability, a rate no higher than that in people without comorbidity. These findings reinforce the theory that social anxiety disorder itself is associated with financial dependency on welfare or disability. The ECA study\textsuperscript{4} also looked at rates of employment. Fifty-two percent of those with social anxiety disorder were employed compared with 61.0% of those with no mental disorder. In summary, social anxiety disorder appears to be strongly associated with higher rates of unemployment and current receipt of welfare or disability payments.

Marital Status

The National Comorbidity Survey\textsuperscript{13} found that the odds ratio for being separated or divorced was 1.5 times higher in persons with social anxiety disorder than in controls with no psychiatric disorder and that the odds of never being married were 2.0 times higher. Interestingly, Hart et al.\textsuperscript{23} found that persons with social anxiety disorder who were single had more severe social anxiety disorder symptoms and higher rates of comorbid depression and avoidant personality disorder than did persons with social anxiety disorder who were married. It was not possible to determine in this study if the higher rates of being single were related to having more severe symptoms or if those who were single were able to successfully avoid situations, which, over time, led to increased avoidance and impairment. These results are consistent with the study by Wittchen and Beloch,\textsuperscript{5} which found that 47.7% of those with social anxiety disorder had never married compared with 32.3% of controls. They also found divorce rates to be higher in individuals with social anxiety compared with controls (16.9% vs. 7.7%, respectively). Not surprisingly, social anxiety disorder is associated with an increased risk of marital problems and never being married.\textsuperscript{5}

Health Care Utilization

Although it is well known that major depression is associated with rates of health care utilization twice as high as those in similar individuals without depression,\textsuperscript{24, 25} the literature is controversial regarding the relationship between health care utilization and social anxiety disorder. Wittchen and Beloch\textsuperscript{5} found “no clear evidence” that subjects with social anxiety disorder, with or without comorbidity, used health care resources significantly more frequently than controls. However, the ECA study\textsuperscript{1} found higher rates of outpatient visits and higher rates of mental health specialty visits in those with social anxiety disorder who had comorbidity than in controls with no psychiatric disorders. The mean number of medical visits over a 6-month period in those with social anxiety disorder was 3.12 compared with 1.69 for controls with no psychiatric disorders. There is a need to study a population that has a single insurer so that health care utilization can be directly measured and other variables that affect utilization can be controlled. Such a study is presently being completed at the Dean Foundation in Wisconsin.\textsuperscript{16}

SUMMARY

There is strong evidence that social anxiety disorder is common, begins at an early age, has a chronic course, and is associated with a much higher risk of subsequent serious psychiatric comorbidity. Individuals with social anxiety disorder have lower quality of life; impaired educational, social, and occupational functioning; and higher rates of financial dependency. In addition, they are more likely to be divorced or never to have married and are at increased risk of suicide compared with those without social anxiety disorder. Despite the serious nature of social
anxiety disorder, at present it is rarely identified and treated. This is especially troubling now that effective pharmacologic and psychotherapeutic treatments are available that can dramatically decrease the negative impact of the disorder. There is a need for effectiveness studies assessing the long-term impact of treating individuals suffering from social anxiety disorder to determine if treatment decreases their risk of suicide and other psychiatric disorders and improves the trajectory of their lives.

REFERENCES

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Question and Answer Session

Question: Have you shared the results of your study1 with insurance providers, and, if so, what was their response?

Dr. Katzelnick: I spoke with the medical director of a health maintenance organization (HMO) about getting approval for conducting a screening study for social phobia. His initial reaction was, “We’re already spending a fortune on these medicines and now you want me to go and find more people who have disorders?” I said, “No. We’re trying to find out how many people in the HMO actually have a problem that is similar to other psychiatric disorders in its effect on quality of life and other variables.” He said, “You’re saying this is going to help me understand who should or shouldn’t be getting this medication?” From that perspective, he became very enthusiastic.

Question: What are the responses of primary care physicians?

Dr. Katzelnick: Primary care physicians are actually quite interested. In general, they do not recognize or diagnose social phobia. When they do recognize it, β-blockers are the most commonly prescribed treatment. However, β-blockers are largely unsuccessful for this disorder. When primary care physicians first learn about the symptoms of social phobia, usually they immediately identify some of their patients as being affected, and they want to learn more, particularly when they realize that it can be treated successfully. To some extent, primary care physicians are much more interested than psychiatrists. Psychiatrists say, “I don’t see very many people who have pure social phobia. I see the comorbidity; I’m treating the comorbidity.” And then we discuss why it makes a difference to diagnose the social phobia, as well. Primary care physicians connect to the diagnosis of social phobia much more directly.
Yet some doctors feel that social phobia is not something they should be treating. I think the most disturbing thing is if someone with social phobia does talk to a doctor, and the doctor says, “Yes, I had trouble giving a speech once, too.” The patient feels the condition is minimized and misunderstood. Once it’s not taken seriously, the issue is probably never going to be brought up again. On the other hand, some people perceive social phobia as a part of their personality, not as a medical problem.

We should think about educating primary care physicians to first recognize social phobia and then take it seriously. It’s a big task because social phobia is another illness out of the long list of disorders to be identified in a 5-minute encounter with a patient. Physicians will ask, “Why should I be bothered with it?” Perhaps we can put our ideas together on that.

My sense has been that the challenge, in a large system, of getting all primary care physicians to systematically screen their populations for social phobia is not going to be overcome right away. It would be nice if it were, and the data support such screening, but it’s probably not going to happen immediately. But the first step is to have primary care physicians recognize that social phobia is a real disorder that is serious and treatable. So if a patient comes in and says, “I read this article, and I have all these different symptoms, and the article said talk to your doctor,” the doctor will take the concerns seriously and treat patients or refer them to a mental health specialist. For patients who don’t initiate the idea of treatment, it will take time to help them understand that social phobia is a treatable disorder.

Comment: I know of a case regarding a patient who sweated profusely, which was a significant problem in social situations. His condition was helped by β-blockers.

Dr. Katzelnick: I treated a patient quite similar to that. He did “cold” sales, and in situations where he didn’t know anybody, he would sweat continuously. He kept 3 suits in his car. This sweating did not happen when he was with people whom he knew and who were receptive to buying. However, he denied having any anxiety. He said, “I’m not nervous. I’m just sweating a lot.” The patient got dramatically better with a fairly low dose—50 mg/day initially—of the selective serotonin reuptake inhibitor sertraline. In the end, his sweating problem went away with a sertraline dose of 25 mg every other day. A year later, he asked me to see his brother, who was having a similar problem.

I think that one solution is to systematically screen for social phobia, but probably as part of a larger screen for multiple disorders. This is quite reasonable if one uses a screening instrument that includes social phobia. Another question concerns the age at which to start treatment. Should you treat patients who meet the criteria for social phobia at age 11? How many of these people grow up to have a real disorder, and how many find other ways of coping with it? The answer is, I don’t know.

Comment: It’s also not clear how many 12-year-olds are willing to get treatment.

Dr. Katzelnick: Exactly. If it was in the school setting, with simple cognitive-behavioral methods, it might be different. But you are right in saying that a large majority would not come to see a specialist.

Dr. Davidson: It seems to me that in order to screen for social phobia within the context of multiple disorders, we should put together a scale of 8 to 12 items, at the most, that could screen patients for all major anxiety disorders in the same manner as the 3-item mini-SPIN [Social Phobia Inventory].

REFERENCE

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