# SOCIAL ANXIETY DISORDER IS NOT JUST SHYNESS: A COMMON BUT UNDERDIAGNOSED CONDITION

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## ABSTRACT

**Social anxiety disorder (SAD) is a common but unfortunately under-recognised type of anxiety disorder, leading to 80 percent of the patients undertreated. SAD can present a diagnostic challenge to primary care physicians as patients may present only when they start developing psychiatric comorbidities. Recognition and differential diagnosis of SAD is important for primary care physicians as untreated SAD is highly associated with comorbidities and significant functional impairment.**

**Our objective in presenting this case series of SAD is to illustrate the typical and atypical ways SAD can present, including an atypical case that may have been mistaken as a psychotic disorder. We also discuss the differential diagnosis, Etiology and treatment for SAD. SAD often shows good response to medications and psychotherapy. Hence, it is important to recognise and provide appropriate early intervention to prevent the development of comorbidities and improve function.**

**Keywords: Anxiety, anxiety disorders, phobia, primary health care, social**

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## INTRODUCTION:

Anxiety disorders are common mental health conditions with an estimated 3.6 percent in the global population, according to the 2017 World Health Organisation (WHO) report. The same report found that it is more common in women than men, and it has a higher prevalence in the younger age group.[1]

Anxiety disorders span many different types, and the commonly encountered types are generalised anxiety disorder (GAD), panic disorder, agoraphobia, and social anxiety disorder (SAD). In Singapore, amongst the anxiety disorders, only the lifetime prevalence of GAD has been studied, and it has found to have increased from 0.9 percent in 2010 to 1.6 percent in 2016.[2] Globally, WHO found that SAD is just as prevalent as GAD with a lifetime prevalence ranging from 1.3 percent to 4 percent.[3]

According to the Diagnostics and Statistical Manual of Mental Disorders (DSM-5), SAD is defined as marked fear of one or more situations where the individual is exposed to scrutiny by others. This may include interaction, observation, or performance situations. They are afraid of acting in a way or showing anxiety that will lead to negative evaluation. The fear is out of proportion to the actual threat and the social situation always provokes anxiety. It can lead to significant impairment in their daily function.[4]

Patients prefer to seek help from their own General Practitioners (GPs) or other primary care physicians for mental health conditions rather than a psychiatrist.[5] Amongst the various anxiety disorders, SAD presents several unique challenges to the primary care physicians.

SAD is easy to diagnose when the history obtained from patients is typical. This could be fear provoked during presentations to teachers in school or superiors at work, commonly known as "stage fright". Other typical scenarios could be excessive anxiety when they must eat with others. However, it can sometimes present in ways that are subtle like feeling shy when interacting with others in social situations. Hence it is easy to overlook in the primary care setting.[6]

Furthermore, it is a diagnostic challenge as it can be hard to differentiate it from other mental health conditions like agoraphobia, avoidant personality disorders and body dysmorphic disorder.[7] There may be a delay in seeking help as patients may be too anxious to disclose these symptoms to their family doctors. There is a chance that patients and/or doctors may regard it as normal as many people do have some degree of "stage fright" or "shyness". These have resulted in up to 80 percent of people with SAD untreated.[8] However, SAD is not just "shyness" and up to 90 percent of the cases have other comorbidities like depression and alcohol use disorder.[9, 10]

In this paper, our objective in presenting this case series of SAD is to illustrate the typical and atypical ways that SAD can present. We will discuss the need to assess the nuances in the history to differentiate it from other diagnoses. We will then highlight the etiological factors. Lastly, we will discuss how GPs can manage it from a pharmacological approach and psychological approach as well as the community support that patients can tap into.

## CASE SERIES

Case A is a 26-year-old female who was referred by her primary care physician for anxiety symptoms spanning

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several years. She reported feeling uncomfortable when meeting people and an intense fear that others would judge her negatively. She had been avoiding social gatherings as she imagined that she will be humiliated in front of others. She recounted experiencing palpitations, nausea, and abdominal discomfort when in social settings. She was able to visit crowded places and take public transport on her own without interacting with others. There were no symptoms to suggest agoraphobia or depression. She was still able to perform her career as a personal fitness trainer although it could be quite challenging at times as she perceived that clients may judge her body fitness as a personal trainer. However, she did not have symptoms suggestive of body dysmorphic disorder. Her marriage of six months had been stable, and her husband was supportive. She was diagnosed with social anxiety disorder and started on fluvoxamine and referred for psychotherapy.

Case B is a 25-year-old male diagnosed with anxiety, depression, and psychosis while in his late teenage years. At his initial presentation, he had experienced thoughts and fears of people talking about him and wanting to harm him when in school, but not in other settings. He was treated with fluoxetine 40mg, aripiprazole 10mg as well as propranolol and lorazepam as required for anxiety and symptoms of akathisia. He reported having defaulted his medications and appointments three years before his current presentation due to the sedation and symptoms of akathisia he had experienced while on the medications. At his current presentation, he reported feeling increasingly poor in his mood and anxiety. He also avoided people and crowds for fear of being judged. His developmental history was significant for being bullied while in primary school and being a victim of outrage of modesty when in secondary school. He reported nightmares, flashbacks, and anxiety feelings whenever he encountered students or memories of his past traumatic experiences. On detailed history-taking, he reported no hallucinatory experiences or delusions. His diagnosis was revised to that of social anxiety disorder and post-traumatic stress disorder with secondary low mood. He was treated with sertraline up to a maximum dose of 100mg and provided with psychotherapy, with significant improvement of his symptoms. At the time of his last consultation, he was doing well on sertraline 75mg.

Case C is a 40-year-old male who was referred by his primary care physician for anxiety symptoms and poor mood. His main presenting complaints were fears about the COVID-19 situation and being forced to take the vaccine, as he was afraid of needles. He was also worried about an upcoming cardiac procedure that his mother was being scheduled for, as he was afraid of being left alone if she passed on from the procedure. On top of that, he reported being fearful of being judged by others and worried that he will embarrass himself in social situations. Because of that, he had been withdrawn and isolated since his teenage year, and he only engaged in solitary hobbies such as collecting toys and playing computer games. This had also made it difficult for him to find employment and unable to attend church activities as a Christian. He had only worked part-time in a clerical job that did not last for more than three months after graduation and had not worked after that, explaining that he was required to care for his physically ill father for ten years. His social interactions had been almost exclusively with his parents and brother for most of his life. He was diagnosed with adjustment disorder with depressed and anxious mood and SAD. He was commenced on escitalopram 10mg and lorazepam 0.5mg as required for anxiety. He was also referred for psychotherapy. At his subsequent review, he reported improvements in his mood and anxiety symptoms. He was able to leave the house on his own although he was still avoiding social interactions

## DISCUSSION

Case A is a straightforward and typical presentation of SAD without comorbidity. She had a good insight into her condition and came forward to seek help after enduring her condition for two years. The primary physician referred her for anxiety which is a broad term under which SAD is categorised. If diagnosed accurately by her primary care physician, she could have received intervention in the primary care setting.

Case B is a complex case as the patient was initially diagnosed with a psychotic disorder and treated with antipsychotics which he developed side effects to and hence defaulted treatment. He did not just suffer from SAD but also PTSD with secondary depression in view of his past traumatic experiences. We did not have access to his previous psychiatric notes when he was first diagnosed with psychosis. However, the history he provided at this presentation had been strongly suggestive of SAD, rather than that of a psychotic disorder. The fear of people speaking negatively about him and judging him could possibly have been mistaken for delusions of reference. He responded to Sertraline and fared better than the regime with antipsychotic medication that he was on.

Case C is not a straightforward case as he had experienced anxiety involving several aspects of life in addition to his fear of being judged in social situations. Often, patients may not present primarily as a fear of being judged in social settings. However, it will be important to check and not miss out on this debilitating fear that affects patients' functions significantly. In this case, SAD had prevented him from working, and the patient feels comfortable avoiding all social situations and prefers to be in his safe space within his family. He declined to seek help, avoiding social situations for years and as much as he could and looked after his sickly father instead of working. His mother had noticed that even after his father's passing, he was still reluctant to find employment for fear of being judged and criticised. He was also worried that he might offend others. He finally sought help when he realised that his mother would not always be around to protect him.

## Differential diagnosis:

SAD is a psychiatric disorder, and it should not be mistaken as shyness. While cognitively and behaviourally similar, SAD is much more distressing and can lead to significant avoidance behaviour and impairment in function. Shyness, while prevalent and heterogenous, does not cause any significant disability or dysfunction.[11]

Patients frequently present to the primary care doctors for assessment or treatment before they are willing to seek help from the psychiatrist. Although SAD can be distinguished from other psychiatric disorders, certain areas make the distinction challenging. Agoraphobia can be mistaken as SAD as patients present with similar struggles with going to public places and significant avoidance of being in crowded places which will provoke panic-like symptoms or cause embarrassing symptoms. The main distinction in agoraphobia is that the patient fears being in situations where escape may be difficult, or help might not be available. In agoraphobia, the patient may even fear being in enclosed places or being away from home on their own. Hence, it will be important to increase the awareness among primary care physicians on this condition and differentiate SAD from other anxiety disorders as the psychological intervention will be different.

It can be challenging to differentiate SAD from an avoidant personality disorder (APD). Often, both exist in a symptomatic continuum and can co-occur leading to more severe forms of anxiety.[12] In avoidant personality disorder, they often have fears of being rejected or ridiculed in interaction with others and not just in social situations. People with APD are usually unwilling to get involved with people unless they are certain of being liked. They also tend to have a poor opinion of themselves.

Another important differential diagnosis is body dysmorphic disorder (BDD) as individuals may avoid social situations due to the perceived body defect. The key points to differentiate BDD from SAD are the preoccupation with perceived defects or flaws with repetitive checking behaviours or mental acts in response to the appearance concern.

## Comorbidities:

It is important to recognise and treat SAD. Untreated SAD often leads to the development of comorbidities such as mood disorders like major depressive disorder or dysthymia and other anxiety disorders like generalised anxiety disorder or panic disorder. SAD is also highly associated with alcohol and substance use disorder. Often, the comorbid condition drives the patient to seek treatment which is also why SAD may be overlooked.[6]

Hence, SAD is frequently under-recognised in a primary care setting as sufferers usually do not report psychological symptoms in simple SAD unless they develop comorbidities.

## Etiology:

SAD usually begins in early childhood or adolescence. However, among adults seeking help, the median age of onset is in the early to mid-teens with most individuals developing the condition before reaching their 20s. Some people can identify significant embarrassing life events which led to the start of their social anxiety.[13] Case B identified embarrassing encounters in his schooling years and SAD occurred in late teens likely related to the traumatic event in school.

Similar to most psychiatric conditions, there is no single Etiology to the development of SAD. People who experienced traumatic childhood experiences such as physical and sexual abuse (such as case B) have higher rates of developing SAD compared to control group.[14] Paternal behaviour and parenting style such as lower emotional warmth, higher level of rejection and overprotection parenting (such as case C) are associated with the development of SAD in their children.[15]

There are multiple hypotheses on the involvement of neurotransmitters in SAD. Medications such as selective serotonin reuptake inhibitor (SSRI) and monoamine oxidase inhibitors have shown to alleviate SAD symptoms, suggesting serotonergic transmission.[16] However, there is little evidence to prove serotonergic pathway dysfunction.[6] The ability of gamma-aminobutyric acid (GABA) and benzodiazepines to provide relief of symptoms in SAD has led to the postulation of possible GABAergic mechanism involvement, though further research is still needed.[17]

There have been several neuroimaging studies conducted in SAD but thus far the results have remained inconclusive. SPECT studies examining areas of the brain activated in SAD found that the dorsolateral prefrontal cortex and left parietal cortex were uniquely found in SAD but not in conditioned anxiety. These brain areas are presumably affected leading to disruption in the planning of affective response and awareness in body position.[18]

## Treatment: Pharmacological intervention

Psychological and pharmacological treatment has been proven effective for SAD, though combination therapy was not found to be superior to either cognitive behavioural therapy alone or medication alone.[19]

Antidepressants such as Selective serotonin reuptake inhibitors (SSRIs) and venlafaxine are both recommended as first-line treatments. Current guidelines recommend the continuation of medication for at least an additional six months with eventual gradual taper if there is good improvement seen within the first three months of treatment.[13] Table 1 shows individual antidepressant dosing and potential side effects.

Benzodiazepines such as clonazepam, alprazolam or bromazepam can be used short-term for temporary relief

while awaiting resolution of symptoms with antidepressants or psychotherapy. Long-term use of benzodiazepine should be avoided, given the potential for dependence. Beta-blockers such as propranolol are not found to be effective in SAD, but they may be used for performance anxiety, for example in giving speeches.

**Table 1: Common antidepressant in the primary care setting**

| Medicines | Common dose | Max daily dose | Common side effects | Precautions |
|---|---|---|---|---|
| **SSRIs** | | | | |
| Fluoxetine | • Initiate at 20mg/day<br>• May increase after 5-7days by 20mg/day. | 80mg | ◦ Nausea<br>◦ Vomiting<br>◦ Insomnia (except for fluvoxamine is sedating)<br>◦ Headache<br>◦ Somnolence<br>◦ Nervousness<br>◦ Sexual dysfunction | ◦ Prolonged QTc in Escitalopram<br>◦ May cause hyponatremia or SIADH in high-risk group such as elderly<br>◦ Can cause discontinuation syndrome if discontinued abruptly (irritability, nausea, ataxia, diaphoresis, and increased dreaming) |
| Fluvoxamine | • Initiate at 50mg/day.<br>• May increase after 5-7 days by 50mg/day. | 300mg | | |
| Escitalopram | • Initiate at 10mg/day.<br>• May increase after 5-7 days by 5-10mg/ day. | 20mg | | |
| **SNRIs** | | | | |
| Venlafaxine | • Initiate at 37.5mg/ day.<br>• May increase after every 5-7days by 37.5-75mg/ day as tolerated | 225mg | ◦ Similar as per SSRI | ◦ Similar as per SSRI<br>◦ May cause increase in blood pressure at higher dose (usually >150mg/day) |

**SSRIs: Selective serotonin reuptake inhibitors, SNRIs: Serotonin-norepinephrine reuptake inhibitors**
**SIADH: Syndrome of inappropriate antidiuretic hormone secretion**

## Treatment: Psychological intervention

Exposure therapy, cognitive behavioural therapy (CBT) and social skills training are proven to be beneficial for SAD.[6, 11] Exposure therapy is based on the theory that anxiety can be reduced through habituation. This is done by exposing the individual repeatedly to the feared social situation. For example, the patient will need to repeatedly ask strangers for direction to a location until the individual feels comfortable. Habituation will eventually lead to the extinction of anxiety.

Other types of CBT consist of in-vivo exposure to a feared situation; cognitive therapy using cognitive restructuring; behavioural intervention such as relaxation training, self-control desensitisation and in vivo homework assignments.[20] In recent years, CBT using virtual reality-based exposure is even more advantageous than conventional exposure therapy as the feared situation element can be controlled better when done virtually.[21] This has the potential for wider adoption.-

Social skills training involves training the patient's verbal and non-verbal skills to interact with others effectively and comfortably.[6] This can be done through rehearsal and role-playing with exposure to the feared social situation. Mastering this set of skills can also help ease the patient's social anxiety and adapt to social situations in long-term.

### Community resources:

Having good support in the community plays an important role in recovery for patients with SAD. Singapore has a well-organised and structured community services network providing efficient mental health services to the community. TOUCH Community Services, Ang Mo Kio Family Service Centre Community Services, Singapore Association for Mental Health, Clarity Singapore limited, O' Joy Care Services and Fei Yue Community Services are examples of such community-based services. They offer counselling, psychotherapy, and psychosocial support for this group of patients. These are helpful resources that the family doctors can tap on to provide better and holistic care for the patient.

## CONCLUSION

This case series describes the varied ways that SAD can present, including an atypical case that may have been mistaken as a psychotic disorder. SAD can present as a diagnostic challenge to primary care physicians as patients may not disclose their symptoms and may present only when they develop other psychiatric comorbidities. Hence, it is important to recognise and differentiate SAD from other mental health conditions to provide appropriate interventions. Pharmacological and psychological interventions have proven effective in the intervention of SAD. Patients can also tap on various community services that provide mental health supports.

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