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A Cognitive Behavioral Therapy Intervention Study for Managing Social Anxiety Disorder in Pregnant Women

[1]Pragya Verma [2]Archana Shukla

The present intervention study endeavors to cast a glance at the treatment of social anxiety disorder in a pregnant woman through cognitive behavior therapy. The case study focuses on the successful treatment of a 25-year-old pregnant woman who was experiencing severe anxiety triggered by social situations and traveling. The therapy sessions effectively addressed and managed her anxiety, taking into consideration the unique circumstances of her pregnancy. The case study highlights the significance of individualized interventions and evidence-based approaches in effectively treating anxiety disorders in pregnant individuals. The symptoms were significantly affecting her daily life. The study aimed to assess the efficacy of cognitive-behavioral therapy (CBT) for individuals with social anxiety disorder during pregnancy and involved 12 sessions of therapy. Therapeutic techniques used for social anxiety disorder include psychoeducation, systematic desensitization, exposure and response prevention, and cognitive restructuring. At the end of the therapy, the patient's symptoms were significantly reduced, and relapse prevention tactics were taught to help her manage herself in the future. The study suggests that CBT can effectively treat social anxiety disorder during pregnancy.

Keywords: Pregnancy, Social anxiety Disorder, Cognitive Behaviour Therapy

Introduction

Social Anxiety Disorder (SAD), also known as social phobia, is a mental health condition characterized by intense fear and anxiety in social situations. People with SAD have a persistent fear of being judged, embarrassed, or humiliated, which leads to avoidance or enduring social situations with distress. Symptoms include excessive worry, physical discomfort, and difficulty in social interactions. SAD can also occur during pregnancy, and it can have negative effects on both the mother and the developing fetus (Guardino&Schetter, 2014; Orr et al., 2002). Pregnant women with SAD may have greater stress hormone levels and have more depression and anxiety symptoms during pregnancy than women without SAD (Guardino&Schetter, 2014). Furthermore, SAD during pregnancy can lead to avoidance of prenatal care, resulting in poor maternal and fetal outcomes (Orr et al., 2002).

Cognitive-behavioral therapy (CBT) is an effective treatment that helps individuals challenge negative thoughts and gradually face feared situations through exposure therapy. Medications may also be prescribed. Early intervention and seeking professional help are important for managing SAD and improving quality of life. According to a 2014 study published in the Indian Journal of Psychiatry, social anxiety disorder (SAD) affects around 3% of the population in India, making it a common mental health condition. SAD is depicted by persistent fear or anxiety in social situations where an individual might be negatively evaluated by others, leading to significant impairment in their social, occupational, and academic functioning (American Psychiatric Association, 2013).

Cognitive-behavioral therapy (CBT) is an effective treatment option for SAD, involving a combination of cognitive restructuring, exposure therapy, and social skills training (Acarturk et al., 2009; Hofmann et al., 2012; McEvoy et al., 2016).

[1]*Research Scholar, Department of Psychology, University of Lucknow, Lucknow, Uttar Pradesh, India pragyav777@gmai.com (Corresponding Author)*
[2]*Associate Professor, Department of Psychology, University o[1]f Lucknow, Lucknow, Uttar Pradesh, India.*

CBT is advised as the primary treatment for SAD, and it has been considered better than other psychological treatments (Hofmann et al., 2012). Treatment options for SAD during pregnancy include CBT and medication, but it is important to discuss treatment options with a healthcare provider as some medications used to treat SAD may not be safe during pregnancy (Bandelow et al., 2018).

The aim of this intervention study is to enhance the patient's motivation for therapy, equip her with coping skills for anxiety-provoking situations, alleviate her anxiety, boost her self-esteem, and reframe negative thinking patterns using cognitive-behavioral therapy (CBT), a well-established and effective treatment for Social Anxiety Disorder (SAD).

Seeking professional help is recommended for pregnant women with SAD to ensure appropriate treatment and monitoring of maternal and fetal health. Untreated SAD can lead to the development of comorbid mental health disorders such as depression and substance use disorders (Stein & Stein, 2008). Seeking professional help can improve the chances of successful treatment and improve maternal and fetal outcomes.

The therapeutic package included the following techniques:

1. Psycho-education: Providing the patient with information and knowledge about her condition to increase awareness and understanding.

2. Systematic desensitization: Gradual exposure to feared situations or stimuli in a controlled and supportive environment to reduce anxiety and promote desensitization.

3. Exposure and response prevention technique: Encouraging the patient to confront anxiety-inducing situations while refraining from engaging in avoidance behaviors or safety-seeking actions to promote tolerance and decrease anxiety.

4. Cognitive restructuring: Helping the patient identify and challenge negative thoughts and replace them with more positive and realistic ones to modify maladaptive thinking patterns

Case Report

Sociodemographic-Mrs. SS was a 24-year-old married female educated up to graduation, taking treatment for pregnancy at the Department of Obstetrics and Gynecology at the Integral Institute of Medical Science and Research. She referred to the Psychiatry Department of the Integral Institute of Medical Science and Research (IIMSR) for CBT. The Department provides free treatment sessions to all patients requiring psychological support.

History -Mrs. SS was diagnosed with Social Anxiety Disorder while she was three months pregnant. She was living with her spouse in Lucknow, as her parents live in a village. She was the only daughter-in-law. When asked about her childhood, she said that she had been happy and did not report any traumatic events. The patient reported having a good relationship with both parents and denied any history of psychiatric or psychological disorders or substance abuse within the family. However, the patient has been experiencing severe anxiety symptoms for the last seven months.

Clinical features- The patient has been experiencing severe heart palpitations, flushing, and a fear of fainting and losing control while traveling in cars, autos, and buses. Due to these anxiety episodes, she has become worried about the impact they may have on her pregnancy. In addition, the patient described experiencing chest pain and muscle tension during anxiety-provoking situations, which further exacerbated her fear and led her to avoid these situations, causing significant impairment in her daily life. The patient also reported experiencing similar symptoms when meeting new people due to concerns about being judged for her pregnancy. She sought medical attention multiple times to rule out any pregnancy-related health issues.

She stated that she didn't experience any symptoms of depression, had no prior psychological or psychiatric treatment and/or medication, and had first experienced this problem in the course of the current year. Due to her condition, she was not able to enjoy the period of pregnancy, which she always wanted, and now she has decided to stay at home because traveling and meeting new people are stressful for her.

Clinical evaluation- The patient was asymptomatic before 7 months, meaning she did not experience any symptoms related to anxiety or stress. She was able to perform household work and take care of herself without any issues. However, while traveling to the hospital by bus one day, she suddenly experienced symptoms of anxiety such as nervousness, fear, sweating, and a rapid heartbeat.

These symptoms continued to bother her, and her stress levels increased due to her pregnancy.

The patient showed signs of restlessness and agitation and preferred to be alone, avoiding social gatherings such as parties and family functions. When asked about the cause of her behavior, she mentioned being afraid of being judged negatively by others due to her pregnancy and her fear of traveling. She frequently argued with her partner and exhibited her anger by shouting, crying, and clenching her fists. Due to her unstable behavior, her partner would try to avoid arguments with her. After confirming her pregnancy, the patient became more aware of her health-related behaviors, which increased her stress levels. She began to avoid activities that she had previously enjoyed, and her episodes of social anxiety and heightened stress made her feel restless and worried. As a way of coping, she resorted to watching TV and spending excessive time on her mobile phone, mostly watching pregnancy-related health videos. This distraction prevented her from engaging in healthy behaviors that could help alleviate her stress and anxiety.

The patient's husband observed that she had developed some habits, such as shaking her legs and biting her nails, especially when she was out of his home or traveling. However, when he brought it up and asked her about it, she became defensive and denied it, seemingly unaware of these behaviors. As this behavior continued and the patient consistently denied it, the husband came to understand and stopped asking further questions. While it occurred multiple times, he didn't pay too much attention to it, as he believed his wife's explanations.

The patient initially sought medication for her anxiety from her Gynecologist due to difficulties with traveling and leaving her house. However, because of her pregnancy, she was unable to take anti-anxiety medication and was referred to the Clinical Psychology Unit for psychotherapy.

Psychological assessment- Prior to starting therapy, a psychometric assessment was conducted to measure her intellectual functioning and symptoms of social anxiety. Before beginning the psychotherapeutic intervention, the patient underwent a psychometric assessment to evaluate her cognitive and emotional functioning. The IQ test results revealed that she had an average level of intellectual functioning (Grade III, 25th–50th percentile). Her anxiety symptoms were also assessed using the Hamilton Anxiety Scale (HAM-A), with a score of 20 indicating mild to moderate anxiety. The Severity Measure for Social Anxiety Disorder (Social Phobia), utilizing the Social Phobia Inventory (Liebowitz, 2002), was used to assess her symptoms of social anxiety disorder further. The questionnaire assessed the patient's level of anxiety by measuring fear, phobic avoidance, and autonomic symptoms associated with social anxiety disorder. These evaluations aided the healthcare professional in developing a suitable treatment plan for the patient's requirements.

Thus, a diagnosis was made with the criteria of DSM-5 300.23 (F40.10) for Social phobia or social anxiety disorder in the following case formulation:

Table 1
Showing Case Formulation

Predisposing Factor	Precipitating Factor	Perpetuating Factor	Protective Factor
✦Age ✦Introvert ✦Sensitive to negative evaluation	✦Pregnancy ✦Stress	✦Easily tensed in face of social situation ✦Low self esteem ✦Increased health concern	✦Adherence to therapy ✦Supportive Husband

Process of Therapy

The patient's social anxiety disorder was treated using cognitive-behavioral therapy (CBT), an effective and evidence-based approach that targets negative thinking and behavioral patterns in social situations. The patient underwent a 15-week course of CBT consisting of 12 sessions, each lasting between 1 and 1.5 hours. The primary goal of the therapy was to modify the patient's thinking and behavior in social situations, achieved through a collaborative approach utilizing different behavioral and cognitive techniques.

Table 2
Showing Session Details

S. No.	Sessions	This session incorporates the following intervention
1	Psychoeducation	The patient and her spouse were educated about the illness, its symptoms, and probable causes.
2	Goal Setting or Begin Intervention Techniques.	The therapist helped the patient set daily goals by implementing scheduling techniques and behavioral activation.
3	Continue Intervention Techniques	The therapist continued the intervention by tracking progress and identifying negative thoughts and core beliefs.
4	Continue Intervention Techniques	Introduced deep breathing exercises as a relaxation technique.
5	Refine Intervention Techniques	Refined the intervention techniques as in vivo exposure was used to gradually expose the patient to feared situations.
6	Refine Intervention Techniques	Refined the intervention techniques as in vitro exposure was used to gradually expose the patient to feared situations.
7-8	Continue Intervention Techniques	Social skills training was introduced in sessions
9-10	Continue behavioral intervention	The patient practiced communication skills to improve her social skills and confidence.
11	Discuss Ending Treatment and Prepare Maintaining Changes	The therapist discussed ending the treatment and helped the patient prepare to maintain changes.
12	Maintenance and relapse prevention	End-of-treatment planning involves collaborative preparation of the patient to maintain progress, avoid relapse, and use acquired skills to manage anxiety effectively.

Session 1. Psychoeducation: In the initial sessions, a rapport was established, and they were assured of confidentiality. Thereafter, the patient and spouse were psychologically educated about the illness and the probable causes that may trigger it. Problems faced by her travel and social situation were discussed. The expectations of the patient from the therapy were discussed. They were made aware of the therapeutic procedure and its essential requirements, like the importance of sincerely doing the tasks assigned in order to bring about the desired changes. Both the patient and her spouse understood the mechanism of the illness and agreed to follow the psychotherapeutic management in collaboration with the therapist. The therapist provides information about social anxiety disorder, its symptoms and causes, and how it affects people's lives.

Session 2. Goal Setting or Begin Intervention Techniques: The main goal of the second session was to structure the patient's daily activities by implementing scheduling techniques. Behavioral activation was used to encourage the patient to engage in activities that could improve her mood and overall functionality. The first step involved creating a schedule that allowed the patient to allocate more time to healthy behaviors and less time on her mobile devices. However, the patient had difficulty adhering to health-related guidelines

recommended by her gynecologist. Therefore, a schedule was developed with the patient's input, including her interests, such as using social media platforms like Instagram and YouTube, while focusing primarily on practicing pregnancy care. The schedule was realistically planned to increase the likelihood of compliance, and the patient agreed to limit her use of mobile phones and social media platforms to a specified period each day.

Session 3. Continue Intervention Techniques: To track progress and identify negative thoughts, the patient was advised to maintain a daily diary detailing how much of the schedule she was able to follow. The husband was also instructed to objectively measure changes in her behavior, using her previous routine as a baseline. The focus was on whether the patient was adhering to healthy pregnancy practices such as taking medications and resting, as well as limiting mobile phone use. The therapist assisted the patient in recognizing and challenging maladaptive thoughts that contributed to her social anxiety. Through this process, the patient learned to replace negative thoughts with more positive and realistic ones. For instance, she frequently expressed the belief that she would never be able to enjoy traveling again following her anxiety episodes.

Session 4. **Continue Intervention Techniques:** In this session, the patient was introduced to deep breathing exercises as a relaxation technique. Relaxation techniques are a collection of psychotherapeutic techniques that aim to reduce tension, stress, worry, and anxiety. These techniques are important in brief therapy for several reasons. Firstly, the therapist helps the patient develop skills to alleviate the symptoms of stress, anxiety, worry, and tension that often interfere with their daily functioning. Secondly, these symptoms can be very uncomfortable for patients, and providing help to alleviate their distress can improve their treatment expectations and outcomes.

Session 5. Refine Intervention Techniques: The therapist proceeded to in vitro exposure in the desensitization process, where the client imagined facing feared situations, starting with short trips in an auto and gradually increasing distance and duration. Relaxation techniques and coping skills were taught and practiced during the sessions. The patient reported increased confidence and less anxiety after each imaginal exposure. The goal was to continue with imaginal exposure sessions and work towards independent travel without anxiety or avoidance behaviors. The patient said, "I think now I am able to travel in the car with my husband for a short distance without any stress".

Session 6. Refine Intervention Techniques: The therapist used in vivo exposure to gradually expose the patient to feared situations, starting with short rides in an auto or bus with a trusted person and gradually increasing the distance and time spent in the vehicle. The therapist provided support and positive reinforcement, which helped the patient become more comfortable and confident in traveling, expanding their social and professional opportunities. The therapist may have also provided homework assignments for the patient to continue practicing their skills outside of therapy sessions. According to the patient, "I do not feel any anxiety at all when traveling by car for a short distance." The therapist makes a list of anxiety-provoking situations ranked by difficulty to gradually expose the patient to them in a safe way, helping them develop anxiety management skills.

Session 7-8. Continue Intervention Techniques: In this session, the therapist focused on social skills training for the client to educate her on how it works, and she had to practice the behavior every day. Social skills training can be beneficial for clients with anxiety, fear of public speaking, and other similar issues, as it can help improve their overall functioning in social situations. At this point, the child explained how worrying about traveling and meeting people in crowds terrified her of negative beliefs like "I won't be able to interact appropriately with the people," which in turn led to sweating and hot flashes.

Session 9-10. **Continue Behavioral Intervention:**In this session, the Therapist asks the patient to practice daily communication skills to improve social skills and confidence. Struggle areas were identified, and techniques were taught through role-play activities. The patient overcame anxiety and gained confidence in social situations. The therapy had a positive impact on the client's social skills, allowing her to make new friends and attend a family function. This can lead to better social functioning and quality of life. After several weeks of practice, the client reported feeling more comfortable and confident in social situations. She shared, The therapy had a positive impact on her social skills and ability to make new friends.

Session 11.Discuss Ending Treatment and Prepare Maintaining Changes: The patient and her spouse expressed satisfaction with the positive outcome of therapy, as she was able to attend a family function

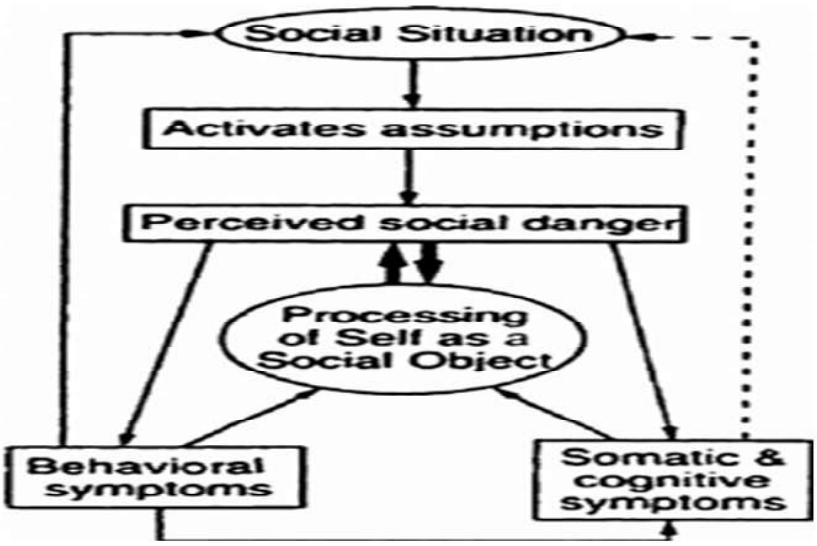
without experiencing anxiety. Although initially she felt the urge to flee, she was able to manage her anxiety and reported feeling less anxious than during a previous event due to practicing relaxation exercises and gaining confidence. The therapist acknowledged and appreciated the progress made by the patient and her spouse. They informed the therapist that they were going on a trip to their hometown and agreed to continue therapy sessions upon their return. Prior to the break, the patient's HAM-A score was 8, indicating a significant reduction in anxiety symptoms. At the end of 11 sessions, the patient showed increased compliance in practicing healthy behaviors, reduced overall anxiety, decreased mobile usage, and increased self-confidence. Future plans include helping the patient maintain abstinence and prevent relapse.

Session 12.-Maintenance and relapse prevention: The therapist assists the patient in developing a plan to maintain their progress and avoid relapse, while the client learns to identify early signs of anxiety and use the skills they acquired in therapy to manage their anxiety effectively. End-of-treatment planning involves the patient's collaborative preparation and assessment of her readiness for discontinuing treatment and moving towards independent use of the acquired skills. The planning process enables the patient to anticipate the end of treatment, review the skills learned in therapy, and discuss and problem-solve any concerns about functioning outside of treatment. To apply these skills in daily life, the client is given homework assignments.

Discussion

According to research, Social Anxiety Disorder (SAD) is a prevalent mental health condition among adults in India, with higher susceptibility among women than men (Jaisoorya et al., 2017). SAD is marked by intense fear, nervousness, and self-consciousness in social situations, resulting in avoidance or enduring social situations with intense fear or anxiety.

To develop an effective treatment plan for the patient, a comprehensive assessment was conducted using a model that considers various factors contributing to her condition, including personality traits, life events, and coping strategies. Based on her symptoms, the patient was diagnosed with SAD (F40.1), and cognitive-behavioral therapy was recommended as an effective treatment option. Cognitive-behavioral therapy involves techniques such as education, goal-setting, behavioral activation, relaxation, exposure, and social skills training to help the patient manage their anxiety and improve their overall functioning (Hofmann, Asnaani, & Hinton, 2010). The therapist follows the cognitive model developed by Clark & Wells (1995) and Clark (2001) to assist the patient in managing their social phobia.



Cognitive Behavioral Model Of Social Phobia (Clark, Wells, 1995) Figure taken from-Nordahl, & Wells,(2022). CBT for Social Anxiety Disorder. doi:10.1017/9781108355605.008

The cognitive model explains why social anxiety disorder symptoms persist despite repeated exposure to social situations. It argues that negative attitudes and assumptions cause negative self-evaluation and the belief that others are judging them negatively, which leads to self-observation and physical sensation monitoring. Individuals suffering from social anxiety disorder may correlate internal information with anxious sensations, resulting in vivid or inaccurate images from the perspective of an observer, and safety behaviors can hinder disconfirmation of the expected outcome, producing even greater distress.

The third element that contributes to the persistence of social anxiety disorder symptoms is anticipatory and post-event processing, which occurs when individuals focus on their feelings and develop negative self-images associated with social encounters, as well as selectively recall past failures. CBT has been found to be an effective treatment for social anxiety disorder, and the therapy techniques used in this case, such as psychoeducation, relaxation techniques, exposure therapy, and cognitive restructuring, were effective in reducing anxiety and improving the patient's self-perception and way of thinking. These findings are consistent with previous research, including that of David (2004).

CBT with exposure and cognitive restructuring has been consistently found to be effective in treating social anxiety disorder in various studies, including meta-analyses by Hofmann et al. (2012) and Wheat et al. (2010), as well as a randomized controlled trial by Dimidjian et al. (2011). These studies support the use of evidence-based treatments, including relaxation techniques and behavioral activation techniques, for managing social anxiety symptoms.

Conclusion

This Intervention study provides a comprehensive exploration of social anxiety disorder (SAD) and its treatment options for pregnant women. The therapy sessions focused on psychoeducation, goal setting, and intervention techniques such as scheduling activities, relaxation exercises, and cognitive restructuring. Gradual exposure to feared situations was facilitated through in vivo and in vitro exercises, leading to increased confidence. Social skills training and communication practice enhanced social functioning. The therapy yielded positive outcomes, including reduced anxiety, improved self-confidence, and overall better functioning. The importance of evidence-based treatments, specifically cognitive-behavioral therapy (CBT), relaxation techniques, and behavioral activation, was highlighted. SAD, a prevalent mental health condition in India, particularly impacting women, is characterized by intense fear and self-consciousness in social settings. The cognitive-behavioral model explained the persistence of symptoms, attributing them to negative self-evaluation, distorted perspectives, and selective focus on negative experiences. CBT with exposure and cognitive restructuring consistently demonstrated effectiveness in treating SAD, as supported by various studies. By managing symptoms and improving well-being, evidence-based treatments contribute to an overall improvement for individuals with SAD.

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