

Case Study

# Case Study on Somatic Symptoms in Adolescents- The Pain Puzzle

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## I N F O

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## A B S T R A C T

Somatic symptoms in adolescents can lead to debilitating impact on their academic and social functioning. It could be a manifestation of anxiety and way of responding to a situation which is perceived as a threat. Unnecessary invasive medical interventions cause more agony to the adolescent. Somatic symptoms in adolescents are one area of research and most misdiagnosed with more common mental disorders with similar symptoms. Early recognition of such disorders can save years of pain, suffering, and cost. Clinical evaluation revealed that the majority of adolescents manifested extremely variable school performance, disruptive behavior, trance, mood swings, and depression. Recent research is identifying a number of factors linking to this and its hidden behind. This paper aims to have a better understanding of somatic symptoms in adolescents and its impact on their academic, personal, social functioning. Discussions are made regarding management plans, and therapeutic techniques that have helped these adolescents to attain their functionality and helping them cope with the same.

**Keywords:** Anxiety, Somatic Symptoms, Pain, Stress, Adolescents, CBT

## Introduction

Anxiety disorders are one of the most prevalent psychopathologies in children and adolescents.<sup>1</sup> Physical symptoms could be the manifestation of anxiety. Medically unexplained physical symptoms are frequently endorsed in clinical samples. Physical symptoms related to stress are very common among adolescent.<sup>2</sup> Emotional stress can lead to somatic symptoms. These somatic complaints occur unintentionally. They are subjected to unnecessary repeated medical consultations. So, PAIN IS A PUZZLE, the PIECES need to be put TOGETHER to GET THE LOGICAL WAY and RESOLVE IT.

There are multiple ways in which somatic complaints can

affect adolescents. Less is known about the long-term implications of somatic symptoms.<sup>3</sup> For people dealing with anxiety disorders, symptoms can feel strange and confusing. At times, the physical sensations can be strong and upsetting.

The combination of factors which result in an individual developing an anxiety disorder differ from person to person. However, there are some major factors that have been identified, which may be common to sufferers.

Constant worries can make a person feel overwhelmed and can affect their concentration, confidence, sleep, appetite, and overall functioning. People with anxiety disorders might avoid talking about their worries, thinking that others might

not understand. They may fear being unfairly judged or considered weak or scared. By helping them trace their anxiety to specific situations and experiences, one may help reduce the overwhelming nature of their feelings.

Managing anxiety disorders as with any adolescent emotional disturbance usually requires a combination of treatment interventions. The most effective plan must be individualized to the patient and family.<sup>1</sup>

Treatment for an anxiety disorder begins with an evaluation of symptoms, family and social context, and the extent of interference or impairment. Hence, it is very important to understand the emotional, family and other factors that contribute to the development and maintenance of the functional somatic symptoms and provide proper management at the earliest.<sup>3</sup>

### Need for the Study

Somatic symptoms (Ss) are characterized by pain that occurs in the absence of an organic cause. The presentation of somatic symptoms may become persistent and lead to functional impairment, which can be led to the absence from school and increased psychological symptomatology and use of health services (Beck, 2008). In addition, Huguet and Miró (2008) found that children and adolescents (aged 8-16) who had chronic pain reported a worse quality of life, missed more days of school and were more likely to use pain medication.<sup>4</sup>

Children and adolescents with unexplained Somatic symptoms usually are attended in primary care; they are done repeated medical check ups and still the pain persists.<sup>3,5</sup> The early detection of such symptoms in adolescents is important to prevent chronic conditions.

Frequently reported symptoms are headache, stomach/abdominal pain,<sup>6</sup> hyperventilation, vomiting, sleep problems.

There are psychological and social factors involved in the development of such symptoms.<sup>1</sup> Hence, this study aims to explore, understand, and manage the underlying factors, stress related to the triggers, and help adolescents attain their functionality.

### Objective

This case study aims to assess how the physical symptoms could be the manifestation of underlying anxiety, psychosocial factors associated with it, and the intervention for the same.

### Method

A sample of 3 adolescents from 14 years to 18 years from high school were selected and given interventions. They were administered Symptom Checklist-90 R (SCL-90R), Screening for Child Anxiety Related Disorders (SCARED),

Child Behavior Checklist (CBCL), Beck Depression Inventory (BDI) to assess the somatic symptoms and screen for other comorbidities. They were given regular therapy sessions. They were given 12-15 sessions for an hour on a weekly basis. The potential reason for their somatic pain was identified. Cognitive behavioral therapy, relaxation training and family interventions were given.

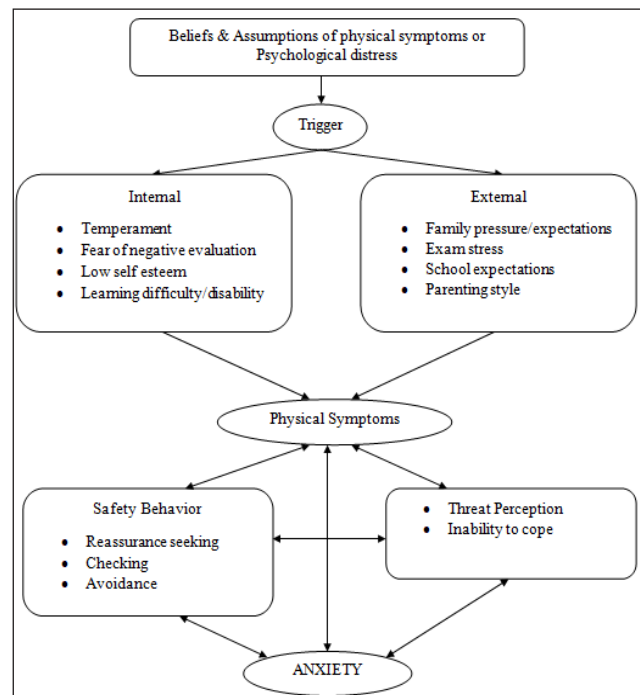


Figure 1

### Formulation

#### CASE I

Mr. B, 18 year old boy studying in 12<sup>th</sup> STD (State Board) day scholar from Namakkal came with complaints of head ache, fainting spells, feeling fearful of exams, thinking about others comments on his performance, difficulty in concentrating in studies for the last 8 months. He had gone for multiple consultations for his pain and did not have significant improvement. As a result, he ran away to Chennai without informing anyone (Avoidance) and was found after 3 days. Personal history revealed no significant birth or developmental complications. Temperamentally, he is a shy person and hesitant in adapting to new people and situations. Family history revealed anxiety disorder in father and suicide in paternal relatives. On detailed assessment, it was found that he was sensitive temperamentally, he had unrecognized learning disability which hampered his academic performance.

Moreover, his father had a critical attitude which led to pressure and resulted in frustration. All these factors created anxiety in him which manifested as headache with no physical cause.

**CASE 2**

Ms. D, 17 year old from Coimbatore, studying in 11<sup>th</sup> STD in CBSE, day scholar came with complaints of stomach pain, sleep disturbance, tiredness, poor concentration in studies, poor interaction with others. She had these complaints for 2 months following her exams. She also refused to go to school some days due to somatic complaints. Multiple consultations were done for her physical symptoms. However, there was no significant improvement. She was a class topper and her sudden absence created anxiety in her parents and concerns among school authorities. On detailed analysis, it was found that she had pressure from her parents which made her set unrealistic targets. She also had fear of being negatively evaluated by others. This created exam stress and anxiety about her performance in final exam. This intense fear came out as bodily symptoms and impaired her functioning.

**CASE 3**

Ms. S, 14 year old female, 9th grade was brought with complaints of frequent fainting episodes over the past 3 months, at school and at home. Consultations had been done with physician and neurologist. Medical reports were normal. She had been brought by her parents. Detailed history revealed that there were inconsistent parenting styles (father was permissive and mother was authoritative) causing increased familial distress. She had frequent conflicts with grandmother as well.

She also had learning difficulties especially with mathematics. Her fainting episodes were analyzed to be closely associated with her study patterns and her conflicts and dimension associated with her absence was avoiding negative affectivity and evaluation anxiety.

**Assessments**

Adolescents were administered symptom checklist-90 R(SCL-90R) to assess the somatic symptoms. Assessments like Screening for Child Anxiety Related Disorders (SCARED), Child Behavior Checklist (CBCL), Beck Depression Inventory (BDI) were administered to screen the co-morbidities. They were also assessed for learning problems when needed.

**Therapeutic Management****Outline****Individual Intervention**

- Assessments and formulation
- Pharmacotherapy
- Psychoeducation about anxiety and somatic symptoms
- Cognitive therapy to alter the cognitive errors
- Anxiety management through relaxation training
- Coping skills training
- Study skills techniques

**Family Intervention**

- Parenting practices
- Reduce expressed emotion
- Contract for desirable and undesirable behaviors

**Recommendations for Learning Issues if any**

- Follow up on regular basis

**Therapeutic Sessions****Assessments**

The therapy focused on managing somatic symptoms and the co-morbid specific disorders like anxiety, depression, OCD, ADHD. Initial sessions focused on detailed assessment.

The adolescents were administered Symptom Checklist-90 R(SCL-90R) developed by Leonard R. Derogatis (1973) to evaluate a broad range of psychological problems and symptoms of psychopathology. It is also useful in measuring patient progress or treatment outcomes. It has 10 sub scales: Somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, anger-hostility, phobic-anxiety, paranoid ideation, psychoticism, and additional items. It has 90 items to be marked on a 5-point rating scale.

Screening for Child Anxiety Related Disorders (SCARED) was administered to screen for other anxiety related disorders. It has 41 statements on a 3-point scale. It was developed by Brent et al in 1999.

They were also administered Child Behavior Checklist (CBCL) by Achenbach which has 140 items on behavior or emotional problems exhibited during the past six months as rated on a 3-point scale.

Beck Depression Inventory (BDI) created by Aaron T. Beck is a 21-question for measuring the severity of depression. Screening for Learning Disability was done when required.

**Pharmacotherapy**

Pharmacotherapy is recommended when the severity of the problem is higher. They are started on anti-anxiolytics and antidepressants. They are maintained on a dosage till the symptoms reduce and then gradually tapered.

**Psychoeducation**

Psychoeducation was given to the patients and parents about somatic symptoms as how psychological factors and conflicts are linked to physical symptoms. It is a way of responding to stress. Psychological distress can exacerbate the symptoms and interfere with functioning.<sup>7</sup>

Its impact on one's wellbeing also leads to worry, isolation, and depression, which will be educated to the adolescents.

**Cognitive Therapy**

The cognitive therapy focuses on identifying the triggers which can be people, places or things, and the patient's

feelings experienced in those triggering situations. It focuses on identifying the distorted thoughts, challenging, and create a dissonance.

Altering their common distortions like mind-reading, magnification, personalization and jumping to conclusions was done.

How faulty assumptions and beliefs leads to negative emotions where they indulge in safety behaviors like physical symptoms, reassurance seeking, avoidance was explained.

### **Thought /Feeling Diaries**

Thought and feeling diaries were used to help one become aware of their negative thoughts/ feelings and notice how these thoughts affect one's feelings and behaviors.<sup>8</sup> It also helps to get the accuracy of negative thoughts and attain balanced thoughts.

### **Relaxation Training**

Relaxation training like Progressive Muscle Relaxation (PMR) and deep breathing were given to adolescents to manage anxiety symptoms. They were advised to practice twice per day for betterment.

### **Coping Skills Training**

It aims on focusing the potential stressors. Maladaptive coping strategies can lead to unhealthy outcomes.<sup>2</sup> Therefore, the focus is to identify the preferred coping strategies of patients. Patients prefer less effective, emotion-focused coping strategies over more effective, problem-focused which is associated with a lower level of positive adaptive outcome.

Link between the physiological changes and emotions were explained. Sessions on handling somatic manifestations of anxiety and using healthy coping strategies were done.

### **Study Skills Techniques**

Adolescents are expected to follow or found to have unrealistic study patterns and schedules. They fail to balance expectations and capacity as a result they get distressed and avoid situations related to it. Adolescents were helped with making schedules, organizing their work, techniques to alter their study styles, planning for tests and exams.

### **Family Intervention**

#### **Parenting Practices**

Parent-child attachment and parent's interaction has crucial impact on emotional development. It can either facilitate support or impede the child and adolescents. It has been proposed that adolescents with an insecure attachment are not able to develop adequate emotion regulation skills or a positive sense of self.<sup>8</sup> Parenting behaviors such as overprotection or critical parenting accommodate or

enhance avoidant strategies which are likely to impact on the maintenance and development of anxiety disorders.<sup>1</sup>

Parental modelling of fearful behavior and avoidant strategies is also likely to increase the risk. Interventions were given working on these issues.

### **Reduce Expressed Emotions**

The family would undergo emotional outbursts. Reducing excessive use of blame or praise, high emotional involvement could be intrusive. Hostility or negative attitude will pull back the patient and has trouble in problem solving in the family. Criticality is yet another issue. Tending to compare with others, insisting on negatives are factors that might perpetuate the problems. Family was educated about reducing the expressed emotion in the patient's environment.

### **Contingency Management**

This is based on rewarding positive behaviors and taking away privileges on negative ones. Parents should gain control over various activities which may be initially countered with emotional reactions.<sup>1</sup> Parents need to be taught to handle these behaviors using effective communication and negotiation.

### **Learning Issues**

In case of any learning-related problems, a tutor or a remedial trainer is recommended to lessen the burden and cope better with academics. It would be advised to give regular feedback about the same.

### **Follow Up**

After gradual exposure and reduction in anxiety symptoms, the adolescents were called for booster and review sessions once in two weeks or once in four weeks. Then they were seen on monthly basis. When they were able to maintain well with family, peers and school and able to handle the tasks effectively, the sessions were terminated gradually.

### **Approach**

As explained, goal of any treatment for anxiety should be to return the adolescent to a typical level of functioning. As defined, somatic symptoms are highly prevalent among adolescents with anxiety disorders and are associated with greater anxiety severity and impairment.<sup>5</sup> It could be an anxiety manifestation due to cognitive distortions and poor coping mechanisms. Henceforth, patients were taught to observe times when symptoms are triggered and then learn how to alter behaviors and thinking patterns. Additionally, how to cope with stress, be more assertive, and problem-solving more effectively is also emphasized. Importantly, do check for some assets in adolescents to facilitate for betterment.

Thus, it is intended to work as a multidisciplinary team and

sometimes requires “out of the box” method for effective outcome.

## Conclusion

Adolescents face the challenges of stress nearly every day. The amount of stress is often influenced by anger, anxiety, depression, and low self-esteem. In these cases, it is seen how patients perceive a potential threat and think they can't cope up with it effectively. Therefore, they indulge in avoidance or safety behaviors which make anxiety better in the short term but worse in the long term. So, it is important to identify the stressors, unhelpful thought patterns associated with it, focus on altering their cognitions, and manage the situation in a healthy way.

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