Yoga Therapy's Effectiveness as a Complementary Modality for the Treatment of Somatic Symptom and Related Disorders

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Introduction

A hallmark of the field of Western medicine is its separate treatment of the mind and the body. This separation has certainly had its benefits- Western medicine's success is largely dependent on its dualistic philosophy (Gendle, 2016). This dependency also had its fair share of drawback. As the mind-body debate generates further research, the non-dual approach to medicine is showing positive outcomes and, perhaps more importantly, gaining ground. This poses a challenge when it comes to treatment, however, as historically, psychotherapy and medical treatment have been kept separate and almost always allocated to completely different diagnoses. Therefore, when a diagnosis has roots in both physiological and psychological symptoms, it can be difficult to determine the best course of treatment. In such cases, nondual treatment modalities such as yoga therapy are uniquely suited to the challenge and in some cases may even hold the advantage in both treatment effectiveness and moderation of risk.

History

Somatic Symptom Disorder (SSD) is one such diagnosis. This diagnosis is the current terminology for somatic symptoms that cause significant distress for the patient and may or may not have a medically explained cause. While it is a newcomer to the American Psychiatric Association's Diagnostic and Statistical Manual [DSM-5], having replaced the "Somatoform Disorders" category in Axis I of the DSM-IV, it's far from a new phenomenon (American Psychiatric Association [APA], 2013)(APA, 2000). Historically an enigma for the medical community, this collection of diagnoses and related symptoms has had many labels over the years, from *reflex insanity* and *hysteria* in the 1800s to *somatization* and *hypochondriasis* in the 20th century (Shorter, 1992). Interestingly, the cause has also swung back and forth between the

organic end of the spectrum and the psychogenic, rarely settling in a balanced spot in between. Earlier proposed causes included everything from spinal irritation and compression of the ovaries to 'auto-suggestion' and repressed memories (Shorter,1992). Even in the current manual, the diagnostic criteria for Somatic Symptom Disorder have been edited as recently as 2016 (APA, 2017). The search to find and cure the source of patients' symptoms has led to frustration on behalf of physicians, whose diagnostic testing often come up lacking in these cases. For the patients themselves, the risk of misdiagnosis can be even higher. The dismissive 'it's all in your head' response does little to reduce their pain and can lead to missing necessary treatment when there *is* an underlying physiological basis. On the other side of the spectrum, if the symptoms are rooted in psychogenic causes they may end up undergoing risky surgeries or treatments that do nothing to alleviate the symptoms. While not everyone who has somatic symptoms will qualify for an SSD diagnosis, a look at the interdependence of physiological and psychological health presented in these cases can help us better appreciate the biopsychosocial approach to diagnosis and treatment.

Somatic Symptom and Related Disorders

While this often misunderstood category of symptoms has undergone multiple reincarnations over hundreds of years, a common theme is the stigma assigned to those who present with such symptoms, and transformations of the title or symptom list are often due to a desire to reduce the negative perceptions of both the public and the medical community in addition to improving treatment protocols (Shorter, 1992). The redesign of the diagnostic label and its criteria in the DSM-5 has taken great strides toward resolving this limitation.

Somatic Symptom Disorder

In its current iteration, SSD is a psychiatric diagnosis that is characterized by the presence of physical (somatic) symptoms along with persistent and maladaptive thoughts, feelings, and/or behaviors related to those symptoms (APA, 2013). As with most psychiatric diagnoses, symptoms must be creating distress and/or dysfunction. Importantly, there *may* or *may not* be an associated medical diagnosis (APA, 2013). However, symptoms must be persistent, being present, even if not constant, for more than a 6 month period.

What defines SSD is the presence of physical symptoms and *abnormal* thoughts or feelings in response to those symptoms. Somatic symptoms cause distress in all of us, but in order to actually be diagnosed with SSD the presenting thoughts, feelings, and behaviors must be above and beyond what one would consider an appropriate response. There is also an acknowledgement of a continuum: in addition to the diagnosis of SSD, cases are rated on a severity scale from mild to moderate to severe.

Related Disorders

The DSM-5 eliminated the diagnosis of hypochondriasis, acknowledging the challenges to therapy stemming from the label's negative connotation (APA, 2013). Should an individual have a high level of anxiety regarding their health without any somatic symptoms, they would now receive a diagnosis of Illness Anxiety Disorder (IAD). They would still receive a diagnosis of Somatic Symptom Disorder if there are accompanying somatic symptoms. Studies have shown that the new diagnoses are much more reliable than the hypochondriasis classification (Newby, Hobbs, Mahoney, Wong, & Andrews, 2017).

Three other related disorders that fall under this diagnostic category include 'psychological factors affecting other medical conditions,' conversion disorder,' and 'factitious disorder.' They are beyond the scope of this paper, although many of the same principles described later can be applied to those conditions, as well

Diagnostic Challenges

The changes to this category of disorders marks a big departure of the medical community from the dualistic approach toward mind and body. In the DSM-IV, the absence of a medical explanation (identified as Medically Unexplained Illness) was central to the diagnosis of somatization (Dimsdale, et. al., 2013)(APA, 2013). In the current diagnosis, no specific number of somatic symptoms need be present, and whether or not the symptoms have a medical origin is irrelevant. This makes diagnosis much clearer when presented to the mental health community. The American Psychiatric Association's Level 1 Cross-Cutting Measure (APA, 2013) and their Level 2 Somatic Symptom Questionnaire (APA, 2013) makes diagnosis straightforward and also makes it easier to identify other co-occurring mental health concerns.

This classification also separates SSD from other related diagnoses. Somatic symptoms and health anxiety are commonly seen alongside other mental health conditions, including depression, anxiety, PTSD and complex trauma, bipolar I and II, and borderline personality disorder. When the diagnostic criteria are met for both SSD and another condition, a dual diagnosis is given.

Since it is not necessary for somatic symptoms to have a medical origin in order to qualify for the diagnosis of SSD, these individuals tend to create more frustration for physicians than they do for psychologists. Physicians are trained to search for the organic cause of a

symptom, and therefore seldom consider an SSD diagnosis before full diagnostic testing has been undergone. Because of the wide-ranging nature of symptoms, SSD and IAD can be seen alongside almost any physical illness, although it is more likely to be seen alongside systemic functional syndromes, such as IBS, Chronic Fatigue, or Fibromyalgia. (A key feature of SSD is a syndrome that is continually relabeled. In the case of Chronic Fatigue, for example, previous names were myalgic encephalitis, chronic fatigue and immune dysfunction syndrome, and systemic exertion intolerance disorder) (Kroenke, 2016). These functional syndromes have helped physicians to classify such individuals, although the fact that these syndromes have symptoms comparable to those with known organic causes can present other diagnostic challenges. As a last resort, you'll find physicians simply listing the symptom as the diagnosis: recurring headaches, gastrointestinal distress, and so on.

Warning signs for SSD or IAD include: complex, inconsistent medical history, a number of non-specific symptoms that don't seem to match diagnostic criteria for known illnesses, symptoms that have continued throughout life with varying degrees of intensity, and emotional distress separate from the concern over symptoms. Most complaints fall under the categories of chronic pain, gastrointestinal issues, or issues with the nervous or reproductive systems (Obimakinde, Ladipo, & Irabor, 2014).

Alternative Views of Somatic Symptoms

Polyvagal Theory

Until recently, the paradigm for diagnosing psychosomatic illnesses was largely to test out somatic symptoms with clear organic origins, then provide psychotherapy to individuals with symptoms that could not be explained medically and see if they improved (Shorter, 1992). This

design stems from the assumption that in those cases, symptoms are created from maladaptive cognitive or emotional patterns signaling to the body, and not the other way around. In other words, psychological manipulation creates physiological responses. Dr. Stephen Porges' research into the autonomic nervous system provides a pivot from this viewpoint to one in which the influence of the body's signals to the brain are also acknowledged and there is little distinction between physical and mental illness (2017).

In brief, Polyvagal Theory centers around an individual's experience of safety and identification of threat. It splits the autonomic nervous system into three pathways. In addition to the "rest and digest" response of the parasympathetic system and the threat response of the "fight or flight" sympathetic system, we also have a 'shut-down' extreme threat response, governed largely by a more primitive branch of the vagus nerve (Porges, 2017). It is important to note that the vagus nerve is directly connected to the visceral organs, cranial nerves, the heart, and the lungs. When you look at SSD and related disorders these are the very areas where the somatic symptoms are likely to occur: gastrointestinal issues, migraines, heart palpitations, diffuse thoracic pain, and trouble breathing, respectively (Tatta, 2018).

What started as research into the causes and impacts of heart rate variability uncovered a complex feedback loop governing mammals' responses to their environment that includes not only the autonomic nervous system as most define it, but also the interplay of the endocrine and immune systems (Tatta, 2018). The Polyvagal Theory turns away from the top-down approach to an understanding that the system, when it's working correctly, communicates in both directions. That is, our physical sensations affect our thoughts, emotions, and behaviors in equal measure. His studies show that failing to respect the body's own responses and filtering of

somatic sensations may contribute to illness over time by dampening the bidirectional neural feedback between brain and body (Porges, 2017).

The Yoga Therapy Perspective

Because of its nondual and holistic approach, the underlying philosophy of yoga therapy is able to side-step many of the limitations that Western medicine runs into when addressing somatic symptoms of complex or unknown origin and accompanying emotional distress. The biopsychosocial model is known more directly in the field of yoga therapy as the Pancha Kosha model. Using this framework, we can look at the individual from the perspective of five layers or sheaths (koshas) of being: physical, energetic, cognitive, intuitive, and innate bliss; all of which are interconnected and interdependent on each other (Nishchalananda, 2012). The intention of all yoga, and especially yoga therapy, is to bring balance to the system and help us to experience the deeper, more subtle layers of what we consider to be the 'self.'

In SSD, one would attribute the presence of, and excessive focus on, physical symptoms to the *annamaya kosha,* the physical layer of the body. The idea that these physical symptoms arise from an energetic source, as well as symptoms that seem to be sourced from issues with the nervous system, would relate to the *pranamaya kosha*, or the body's vital energy layer. The *manomaya kosha,* most accurately described as an individual's thinking and emotional patterns, would be the home of obsessive thoughts, hypervigilant behaviors, fears, and distress that symptoms may be causing (or that may be creating symptoms!). *The vigyanamaya kosha,* the layer of intuition, can be the source of higher levels of understanding around the maladaptive patterns present in the mind and body or even a 'sixth sense' of how to bring balance back to the system. It also signifies the social connection: how we may be negatively influenced by a sense

of imbalance in those around us, or positively influenced by an environment that projects safety. When one is present in the *ananda-maya kosha,* or bliss body, the system feels whole, balanced, connected, and free of constriction.

It's possible that the greatest advantage to looking at somatic symptoms from this perspective is the ability to see clearly the bidirectional nature of influence between physical, neurological, and cognitive/emotional patterns. Directly experiencing a sense of the anandamaya kosha, even for a moment, can produce joy and calm in the manomaya kosha. Freeing the flow of energy in the pranamaya kosha can create balance in the annamaya kosha, and therefore better physical health. This interrelation becomes important as we look for effective treatment of complex conditions.

Approaches to Treatment

Psychiatry, Psychology, and Medicine

The first step toward effective treatment is awareness of this differential diagnosis when presented with symptoms that seem organic in origin. Otherwise, physicians are left wringing their hands as test after test comes back negative, leaving the patient feeling more and more hopeless with every result. Patients are often given inappropriate diagnoses, are treated for depression they don't have, and are given multiple interventions that are not necessary or even dangerous (Cosio, 2017). Physicians who understand SSD and IAD can be better prepared to see the warning signs earlier in the process, avoid excessive testing, and ensure that the patient receives proper treatment (Henningsen, 2018).

There are currently no internationally accepted treatment guidelines for SSD and related disorders (Kleinstauber & Rief, 2015). The diagnosis tends to be chronic, however many do

improve (Cosio, 2017)(Kurlansik & Maffei, 2016). There are interventions that have been shown to have some impact. Both cognitive behavioral therapy and antidepressant medication have shown moderate alleviation of symptoms. St John's Wort has also been tested and shown to be more effective than a placebo (Kurlansik & Maffei, 2016). Because there are so few effective treatment options, the medical community is also turning to mindfulness-based therapies, which have shown significant and lasting outcomes.

Yoga Therapy

Removing the distinction between medically explained illness and symptoms with no apparent medical origin makes nondual treatment of these disorders the natural fit. In addition to the demonstrated effectiveness of mindfulness-based therapies, yoga therapy has many treatment advantages. A medical diagnosis is not necessary for treatment- client assessment is based on presentation of symptoms and therapeutic techniques can be applied to symptom management without a clear diagnosis (International Association of Yoga Therapists, 2016). The focus on seeing the whole person along with the longer amount of time spent with the client in comparison to Western treatment models also can provide a more informed picture of the individual's condition.

Yoga therapists are trained to look at the person as a multidimensional system and somatic symptoms as a clue to where imbalance may lie. However, when looking for possible underlying causes, they are not restricted to the specific symptom manifestations. Often, a symptom in one dimension indicates an imbalance in another, and the profession is well equipped to address those complexities.

Polyvagal Theory

From the perspective of Polyvagal Theory, somatic symptoms and associated mental health issues stem from the nervous system's threat response. By avoiding or trying to override its signals, we are telling the body that it is not safe, it won't be properly cared for, or it won't be able to make necessary changes in the environment (Porges, 2017). The body responds by making those signals constantly louder, until the symptoms are impossible to ignore. These symptoms can range from muscle tension and pain to stomach upset and heart issues, but all treatment is based on the same approach: down-regulate the threat response system.

Treatment Principles and Methods

See the Whole Person

The first step to effective treatment is actually understanding who you're treating! Taking the time to ask detailed questions, get a full history, and open lines of communication go a long way in guiding the direction of therapy. Assess the client using the pancha kosha model. Watch how they hold themselves physically, areas where they are guarded or tense, how they walk and sit; get a sense of their energy patterns; find out how they think about their symptoms, how much distress the symptoms are creating; learn about their approach to gathering and analyzing information, how much trust they place in themselves to determine what's causing symptoms; ask what brings them joy.

Begin to identify what triggers their threat response by asking when symptoms become more severe or when they most notice them, what their biggest concerns are, and what has or has not worked for them in the past. It is also important to make sure that an appropriate level of

diagnostic testing has been undergone in the case of any severe or high-risk symptoms, such as chest pain or muscle weakness. This is the time to note any confirmed physical diagnoses or other mental health issues.

Cultivate a Sense Safety

Working to cultivate a sense of safety is the most essential action in the treatment of SSD. When the nervous system reads that the environment is safe, it is able to reduce the intensity of its responses and activate the parasympathetic nervous system. A safe environment will mean something different for every person, but there are some methods that are generally effective.

As social creatures, a sense of connection and relatedness is directly related to safety, so always look for opportunities to connect, listen, share, and support. By getting a detailed history of symptoms, expressing empathy, and asking about the impact of the symptoms on their daily life, you can make sure the client feels heard and understood (Opler, 2017). Then manage your communication style as you guide the client in their practice. Open and inviting language is preferred over direct or forced instruction, as is the use of a soothing voice pattern (soft, melodic, and higher pitch) over deep tones or monotone expression. Also attend to non-verbal cues: open and steady posture, positive gestures, and warm facial expressions (Porges, 2017).

Consider the environment of the room itself, as well, ensuring that it is clean and organized, appropriately lit, away from foot traffic or other commotion, and minimize background noise where possible.

Use the Breath

Because the vagus nerve is interwoven in and around our lungs, heart, and diaphragm, its action and our breathing are inextricably connected. This makes the breath an ideal assistant to the therapeutic process in two ways.

Firstly, helping the client become aware of their breathing and its patterns can help them begin to better notice and understand their body's responses. Is the breath short and shallow or long and deep? In the chest or in the abdomen? Choppy or smooth? The breath becomes an ideal barometer to see what's happening in the system as a whole at any given moment, giving the client the opportunity to make changes before the nervous system becomes overly activated or notice when it is likely that the somatic symptoms are occuring due to an ANS response.

Secondly, we can moderate the breath to affect vagal tone. Full, diaphragmatic breathing and extended exhales promote a vagal relaxation response, calming the system. Emphasis of inhales activate and energize, which may be beneficial in certain cases where the client is shut-down or challenged by depression. Singing or chanting combines the calming effect of extended exhales with the added relaxation response from stimulation of the vagus nerve through the cranial nerve branch, which innervates the facial muscles, middle ear, larynx, and pharynx.

Attune to the Present

Mindfulness-based therapies have shown clear benefits in SSD (Overby Fjorback, et al, 2013). Bring focus to the present moment to eliminate anxiety over future symptoms or depression from past discomfort. Guide attunement to the state of the body without judgement to

generate self-compassion and the space to explore symptoms with openness and curiosity. Focus on areas of safety and ease in the body to reduce hyperfocus on pain or negative sensation.

Empower the Client

By the time someone with SSD or a related condition sees a yoga therapist, they will likely have been told that the symptoms they are experiencing are misleading them more than once. This lack of trust in the body only serves to further enhance the feedback loop. Therefore, there should be steps taken to help the client reconnect with their body's inner wisdom.

Begin by offering small choices in each practice- allowing the client to choose the option that seems the most attractive to them in the moment. As they become more confident, you can invite them to choose openly what they'd like to do in the moment, or even in an entire practice, simply supporting and guiding whatever exercise or activity they've chosen for themselves.

Reassure them that their body isn't broken- these pain responses are there to keep us safe! However, when we don't listen to or understand the message they are trying to send, we may inadvertently encourage them to stay on all the time, becoming hypersensitive to stimuli that aren't actually threatening to us. Educating the patient on the mind-body connection offers an alternative narrative for their symptoms, one that normalizes their experience and provides a pathway for self-directed change.

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