

### Integrative Health for Anxiety, Part I

#### **Overview**

Integrative Health, like Whole Health, is built around the Circle of Health, which emphasizes the importance of personalized, values-based care that draws in mindful awareness and eight areas of self-care: Physical Activity, Surroundings, Personal Development, Nutrition, Recharge, Family, Friends and Coworkers, Spirit & Soul, Mind and Emotions. Conventional therapies, prevention, complementary and integrative health (CIH) approaches, and community also have important roles. The narrative below describes how this approach could have an impact on a person with anxiety.

Depending on individual needs, an Integrative Health approach to anxiety could incorporate a number of different self-care, conventional care, and complementary health approaches. What a person eats can have a significant effect, as can sleep, which both influences and is influenced by anxiety. Physical activity, relationships, safety, spirituality, and many other factors also have important effects. Many professional care approaches can prove useful—even essential, and mind-body approaches are some of the most beneficial, according to the research we have available. These include an array of psychotherapies, meditation, breath work, biofeedback, and imagery, among other options. Acupuncture, various supplements, and an array of other approaches have shown benefit, as described below.

#### **Meet the Patient**

Taylor is a 30-year-old man who works from home part time in IT support. He is married, has two children (ages 5 and 3), and is currently unemployed. He wants to work more, but he notes that his anxiety and irritability have made holding down a steady job difficult for him; he has to have flexible hours, in case he is "too anxious to work.". Taylor has been treated by both a psychiatrist and a psychologist for severe anxiety. He says that sometimes he feels "a little down," but he is not depressed, according to his mental health clinicians and scores on various questionnaires. Aside from his anxiety, he has few other diagnosed health problems, though he frequently goes to the ED or his primary clinician with concerns about different symptoms that crop up for him, such as palpitations, shortness of breath, and digestive problems. His symptoms have become even worse since the start of the COVID-19 pandemic.

Taylor heard about Integrative Health from his psychologist, and he wants to explore other options for treating his anxiety. He is taking medications as prescribed and receiving regular counseling, but the anxiety continues to be problematic.

When his psychologist asked him about his meaning, aspiration, or purpose, Tyler initially said he just wants "to not be so damn scared anymore." On further discussion, he notes he wants to have a stable income so he can move his family to a better neighborhood with better schools, and into a house big enough that his kids can have their own rooms and he and his wife can consider having another baby. He wants to be able to spend time with his kids and attend their sports games and school events without being "knocked down" by panic attacks. He notes that

# **UW** Integrative Health

Department of Family Medicine and Community Health



he has a few good friends, but he does not make new friends easily because of his anxiety. He is not interested in taking group classes or being in support groups.

### **Personal Health Inventory**

Taylor's strengths on his Personal Health Inventory (PHI) are that he has good relationships with his family and friends, who support him during his "anxious times." He also stays physically active. He has a good relationship with his psychiatrist and primary care team, including his psychologist, who is part of that team. He notes that he has learned to hide his panic, but it is tough to do that now "with all that is going on in the world."

On the PHI vitality signs, he gives himself a 4 out of 5 for physical well-being, a 2 for mental emotional well-being, and 3 for how it is to live his life. If it were not for the anxiety, he says, he would probably be all fives. He has some good insights into the connection between his physical symptoms and his state of mind.

For more information, check out Taylor's PHI.

#### Introduction

Feeling a certain amount of stress and fear is intrinsic to human survival. With anxiety, people's normal fear responses are thrown off; the sympathetic fight or flight response is active to the point where it impedes healthy functioning. Anxiety disorders are among the most common problems seen in primary care; in fact, anxiety disorders are the most common category of psychiatric disorder<sup>1,1</sup> with 31% of U.S. adults experiencing an anxiety disorder at some point in their lives.<sup>2</sup> In any given year, 19.1% of adults in the United States suffer from an anxiety disorder, and 23% of them experience severe anxiety.<sup>2</sup> Only 37% of people with anxiety are receiving treatment, and under 12.7% are receiving "minimally adequate treatment." <sup>1</sup> <sup>3</sup>

Anxiety is one of the most common reasons people choose to use complementary and integrative health (CIH) both nationwide.<sup>4,5</sup> Specific anxiety disorders include generalized anxiety, panic disorder, obsessive-compulsive disorder (OCD), and PTSD (featured in its own PTSD Overview). The purpose of this overview is to offer clinicians suggestions and a review of the evidence regarding how to address anxiety using a more inclusive approach, informed by Integrative Health and the Whole Health approach used in the Veterans Administration.

According to the fifth edition of the *Diagnostic and Statistics Manual (DSM-5)*, *fear* is the emotional response to real or perceived imminent threat, whereas *anxiety* is anticipation of future threat.<sup>6</sup> Anxiety is a signal from the brain indicating that there is a potential danger or threat that needs to be addressed to ensure survival. This potential danger can be real or imagined, and the strength of the signal may be stronger than it needs to be. Treat anxiety if any of the following are true:

- It becomes too intense.
- It occurs many times during the day or most days of the week.
- It inhibits daily activities.

# **UW** Integrative Health

Department of Family Medicine and Community Health



Most people with an anxiety disorder will first identify and seek care for physical symptoms associated with anxiety rather than the anxiety itself. They may present to a clinician with a fast heartbeat, fatigue, restlessness, sweats, sleep problems, irritability, poor concentration, trembling, muscle tension, gastrointestinal (GI) problems, or headaches, among other symptoms. On average, a person with anxiety will see 10 health care professionals before he or she receives the diagnosis.<sup>7</sup>

There is no one specific identifiable cause for anxiety disorders or for their severity; anxiety's etiology is complex.<sup>8</sup> Evidence suggests that it arises through an interaction between genetics, physiology, life experiences, and environmental interactions. Anxiety problems tend to run in families, though people without any family history may also develop anxiety problems. 10 A variety of genes are involved, 11 as are multiple different regions of the brain. 12 One structure involved is the amygdala, which exchanges signals with the autonomic nervous system to alert the body to perceived dangers.8. Animal studies show that neuroepigenetics also plays a role; for example, stress can lead to altered expression of genes that influence the hypothalamicpituitary-adrenal axis. 13 A 2019 study of over 1,400 people linked anxiety to lower connectivity between the brain's emotional networks, executive control networks, and other networks<sup>14</sup> scattered throughout the brain. The mix of bacteria in the gut microbiome also has an influence, through the secretion of various hormones and peptides that influence 15 the central nervous system. Neuroinflammation, linked to activation microglia, also plays a role. 16 In panic disorder, cytokine imbalances also have an array of negative effects. <sup>17</sup> Trauma also plays a role. Having four or more adverse childhood experiences increases the odds of having anxiety as an adult by 3.7 times. 18

### Author(s)

This overview was adapted for the University of Wisconsin Integrative Health Program by J. Adam Rindfleisch, MPhil, MD building on the original written by Mario Salguero, MD, PhD (2014, updated 2019).

This overview was made possible through a collaborative effort between the University of Wisconsin Integrative Health Program, VA Office of Patient Centered Care and Cultural Transformation, and Pacific Institute for Research and Evaluation.

#### References

- 1. National Institute of Mental Health. Any anxiety disorder among adults. http://www.nimh.nih.gov/statistics/1anyanx\_adult.shtml. Accessed September 21, 2014.
- 2. National Institute of Mental Health. Any Anxiety Disorder. 2017; <a href="https://www.nimh.nih.gov/health/statistics/any-anxiety-disorder.shtml">https://www.nimh.nih.gov/health/statistics/any-anxiety-disorder.shtml</a>. Accessed January 2, 2020.
- 3. Department of Veterans Affairs, Veterans Health Administration, Healthcare Analysis and Information Group. 2011 Complementary and Alternative Medicine Survey. 2011; https://www.research.va.gov/research\_topics/2011cam\_finalreport.pdf. Accessed February 10, 2014.
- 4. Barnes PM, Bloom B, Nahin RL. Complementary and alternative medicine use among adults and children: United States, 2007. *Natl Health Stat Report*. 2008;12:1-23.
- 5. Healthcare Analysis and Information Group (HAIG). FY 2015 VHA Complementary and Integrative Health (CIH) Services (formerly CAM). <a href="https://sciencebasedmedicine.org/wp-content/uploads/2016/07/FY2015">https://sciencebasedmedicine.org/wp-content/uploads/2016/07/FY2015</a> VHA CIH signedReport.pdf. Accessed September 27, 2018.
- 6. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders: DSM-5.* Washington, D.C.: American Psychiatric Association; 2013.

## **UW** Integrative Health

Department of Family Medicine and Community Health



- 7. Pozuelo L, Ross J, Sussman N. The anxiety spectrum: Which disorder is it? *Patient Care*. 1999;33(13):78-95.
- 8. Lee R. Anxiety. In: Rakel D, ed. Integrative Medicine. Philadelphia, PA: Saunders; 2010.
- 9. Battaglia M, Ogliari A, D'Amato F, Kinkead R. Early-life risk factors for panic and separation anxiety disorder: Insights and outstanding questions arising from human and animal studies of CO<sup>2</sup> sensitivity. *Neurosci Biobehav Rev.* 2014.
- 10. Domschke K, Deckert J. Genetics of anxiety disorders-status quo and quo vadis. *Curr Pharm Des.* 2012;18(35):5691-5698.
- 11. Gottschalk MG, Domschke K. Genetics of generalized anxiety disorder and related traits. *Dialogues Clin Neurosci.* 2017;19(2):159-168.
- 12. Kim YK, Yoon HK. Common and distinct brain networks underlying panic and social anxiety disorders. *Prog Neuropsychopharmacol Biol Psychiatry*. 2018;80(Pt B):115-122.
- 13. Bartlett AA, Singh R, Hunter RG. Anxiety and epigenetics. Adv Exp Med Biol. 2017;978:145-166.
- 14. Xu J, Van Dam NT, Feng C, et al. Anxious brain networks: A coordinate-based activation likelihood estimation meta-analysis of resting-state functional connectivity studies in anxiety. *Neurosci Biobehav Rev.* 2019;96:21-30.
- 15. Lach G, Schellekens H, Dinan TG, Cryan JF. Anxiety, depression, and the microbiome: A role for gut peptides. *Neurotherapeutics*. 2018;15(1):36-59.
- 16. Ramirez K, Fornaguera-Trias J, Sheridan JF. Stress-induced microglia activation and monocyte trafficking to the brain underlie the development of anxiety and depression. *Curr Top Behav Neurosci.* 2017;31:155-172.
- 17. Quagliato LA, Nardi AE. Cytokine alterations in panic disorder: A systematic review. *J Affect Disord*. 2018;228:91-96.
- 18. Hughes K, Bellis MA, Hardcastle KA, et al. The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *Lancet Public Health*. 2017;2(8):e356-e366.