Toward a Lifestyle Medicine Approach to Illness Anxiety Disorder (Formerly Hypochondriasis)

Abstract: *Lifestyle medicine may be the most effective way of treating illness anxiety disorder (IAD), formerly hypochondriasis. IAD as defined in the DSM-5 can now be diagnosed using positive symptoms, which means it is no longer a diagnosis of exclusion. Tools used in lifestyle medicine including motivational interviewing and mindfulness based stress reduction (MBSR) may be particularly useful in the management of IAD.*

Keywords: Illness anxiety disorder, lifestyle medicine, hypochondriasis

Between ill health at one extreme and optimal health at the other on the health continuum exist at least 2 other categories: normal health (absence of disease) and absence of disease but “worried well.” Many of the “worried well” may have illness anxiety disorder (IAD), a new term for what was formerly called hypochondriasis, and the subject of this article.

The etymology of the word hypochondria is hypokhondria, or under the cartilage (the breastplate), referring to the ancient Greek belief that the

thoracic viscera were the source of melancholy, or sadness and worry. Hypochondria was used to mean depression, or melancholy without a real cause (1660) or illness without a specific cause (1839).¹

It was the *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition (DSM-5), that redefined hypochondriasis as IAD.² (It has taken

Somatic symptom disorder: Patients must have one or more chronic somatic symptoms about which they are excessively concerned, preoccupied, or fearful. These fears and behaviors cause significant distress and dysfunction, and although patients may make frequent use of health care services, they are rarely

Patients with IAD [illness anxiety disorder] may not only have anxiety about health and disease in themselves but also in people around them

2 decades of research to redefine hypochondriasis. One reason for changing the name is that hypochondriasis was considered pejorative toward patients.) Hypochondriasis and several related conditions have been replaced by 2 new, empirically derived concepts:

reassured and often feel their medical care has been inadequate. *Illness anxiety disorder:* Patients may or may not have a medical condition but have heightened bodily sensations, are intensely anxious about the possibility of an undiagnosed illness, or devote

DOI: 10.1177/1559827618764649. From Naples, Florida. Address correspondence to: Amy S. Chappell, MD, 2006 East Imperial Dr Naples, FL 34110; e-mail: aschappell5@gmail.com.

For reprints and permissions queries, please visit SAGE's Web site at <http://www.sagepub.com/journalsPermissions.nav>.

Copyright © 2018 The Author(s)

excessive time and energy to health concerns, often obsessively researching them. Like people with somatic symptom disorder, they are not easily reassured. Illness anxiety disorder can cause considerable distress and life disruption, even at moderate levels.

The *DSM-5* diagnosis of IAD focuses on the positive symptoms of the disorder (preoccupation and anxiety) in contrast to the *DSM-IV* focus on medically unexplained symptoms. In a study by Barksy et al, 85.7% of patients with IAD also met diagnostic criteria for a lifetime anxiety disorder.³

This shift in focus from negative to positive symptoms opens up new avenues for treatment where a lifestyle medicine approach including motivational interviewing and mindfulness training may be particularly effective.

Illness anxiety disorder usually begins in early or middle adulthood and may get worse with age. For older individuals, it may focus on the fear of losing their memory. There are 2 main clinical presentations of IAD:

- *Care-seeking type*: The patient will frequently seek medical care, presenting with health concerns and complaints, and undergoing diagnostic procedures.
- *Care-avoidant type*: The patient will have anxiety about presenting for diagnosis and avoid medical care.²

Symptoms of IAD include the following²:

1. Preoccupation with the idea that one has or will get a serious illness
2. Lack of somatic symptoms, or mild somatic symptoms, such as diaphoresis or slight tachycardia
3. Anxiety or concern out of proportion to the objective reality (if there is a verifiable medical condition present)
4. Hypervigilance about health; prone to feeling distressed about health, changes in health, or ambiguous symptoms
5. Frequent monitoring for sign of illness, such as checking blood pressure or temperature several times a day
6. Avoidance of medical care or evaluation due to anxiety about what they imagine will be found
7. Persistence for at least 6 months, although the source of anxiety may shift (fear of diabetes will be superseded by fear of cancer)
8. Not better accounted for by another mental disorder

Patients with IAD may not only have anxiety about health and disease in themselves but also in people around them. IAD patients may research the disease(s) they imagine they have, sometimes inducing what is commonly been referred to as “med student syndrome.” They tend to overutilize health care services and undergo extensive medical care, invasive diagnostic procedures, and even unneeded elective surgeries.

Patients have an obsessional preoccupation with the idea that they are currently (or will be) experiencing a physical illness. Their preoccupation is usually centered on conditions such as cancer, HIV, AIDS, and so on. However, patients may fixate on any type of illness. Patients are convinced that harmless physical symptoms are indicators of serious disease or severe medical conditions. They frequently misinterpret physical symptoms of anxiety as signs of an impending physical health problem. Individuals with IAD usually do not see their concerns as being psychological in origin and thus may reject the suggestion that they consult a mental health professional.

Having a first-degree relative with IAD (through observational learning) is a risk factor for IAD as is a personal or family history of a serious/chronic illness or an experience with the medical profession that diminished trust or confidence in physicians.³ Another risk factor is an major stressor or serious but eventually benign threat to the individual's health. Child abuse or serious illness in childhood is also a risk factor.⁴

The differential diagnosis of IAD includes all of the following:

- Other legitimate medical conditions (in IAD the response to an actual illness is out of proportion to illness severity)
- Adjustment disorders
- Health-related anxiety in response to a serious illness
- Somatic symptom disorder
- Anxiety disorders (health will not be the primary focus)
- Body dysmorphic disorder (the individual will be focused on an imagined flaw in their appearance)
- Major depressive disorder (people who are depressed may have somatic symptoms but the preoccupation will be limited to the acute depressive episode)
- Munchausen's syndrome
- Malingering (feigning illness for secondary gains)
- Drug seeking

Complications of IAD may have a large and negative impact on quality of life. Relationships suffer because excessive worrying and obsession with health may frustrate others. IAD may cause performance issues at work and result in excessive absences. It may cause problems with performing activities of daily living and even result in disability. Financial problems may result from excessive numbers of doctor and hospital visits and the excessive work absences.

Comorbidities are seen in nearly two thirds of IAD patients and include the following:

- Somatic symptom disorder⁵
- Obsessive compulsive disorder (OCD): comorbid with IAD or IAD may be a form of OCD⁶
- Generalized anxiety disorder: the content of anxiety can include, but will not be limited to health concerns
- Posttraumatic stress disorder: trauma content can center on physical concerns (patient with a recent myocardial infarction may overreact to innocuous and ambiguous chest discomfort)

- Psychosis: somatic delusions will have a bizarre content, and no basis in reality
- Bipolar disorder: there will be dramatic complaints about physical symptoms or minor injuries, fabrication, or even Munchausen's syndrome
- Histrionic personality disorder: part of the dramatic presentation may include greatly exaggerated or frequent complaints of medical problems, or an overly emotional response to a minor injury
- Orthorexia: exclusion of certain foods will occur without sufficient objective evidence or formal diagnosis
- Exacerbation of serious medical conditions due to avoidance of medical care, or such frequent presentation for medical care that providers do not take legitimate complaints seriously

It may be useful to think of IAD as an obsessive-compulsive disorder, an approach that was considered but not adopted during development of the *DSM-5*.⁴

The Yale-Brown Obsessive-Compulsive Scale has been modified to assess hypochondriasis and may be used to make the diagnosis of IAD.⁷ The Hypochondriasis Yale-Brown Obsessive-Compulsive Scale is the first clinician-administered semistructured interview for IAD.⁸ This interview seemed reliable and a valid addition to the assessment arsenal measuring IAD symptoms. A variety of self-report questionnaires are available to facilitate assessment of the severity of IAD, including the Illness Behavior Questionnaire,⁹ Illness Attitudes Scale,¹⁰ and Health Anxiety Inventory.¹¹

Although the *DSM-5* does not specify the prognosis or treatment for IAD, it may endure and persist for life, but is amenable to treatment. Treatment techniques used for anxiety disorders have greatly improved the prognosis for IAD.⁴ The lifestyle medicine approach seems more suitable to the treatment of IAD than does the conventional medicine approach as the former treats the cause of the disease, is long term,

Table 1.

Conventional versus Lifestyle Medicine.

Conventional Medicine	Lifestyle Medicine
Treats individual risk factors	Treats lifestyle causes with the goal of primary, secondary, and tertiary disease prevention
Patient is often passive recipient of care	Patient is active partner in care
Patient is not required to make big changes	Patient is required to make substantial transitions
Treatment is often short term	Treatment is always long term
Responsibility falls mainly on the physician	Responsibility falls mainly on the patient with emphasis on motivation and adherence
Medication is often end treatment; emphasis is on diagnosis	Medication may be needed but as an adjunct to lifestyle change

and makes the patient an active partner in care¹² (see Table 1). In the absence of past trauma or conflict, the physician should talk to the IAD patient about exaggerated preoccupations with health. Those complaints should be taken seriously but the physician should acknowledge that the patient's preoccupation with physical symptoms is higher than normal, whether there is a medical diagnosis or not. Patients with IAD may initially resist the idea that their complaints are anything other than a nonpsychiatric medical illness. Motivational interviewing, which is often used in a lifestyle medicine approach to gauge a patient's willingness to change, may be used to assess readiness to accept mental health treatment.¹³ This approach should be introduced early in treatment to increase motivation to change and weaken the patient's conviction regarding the presence of a feared illness.⁴ The situation is not unlike that faced with fibromyalgia (FM) patients who, in the past, were often considered chronic complainers without a legitimate disease. We now know that many of them have a lower than normal

pain threshold (demonstrated by functional magnetic resonance imaging), which helps explain why they have generalized, widespread chronic pain.¹⁴ FM patients should now be told that they have a decreased pain threshold. Their treatment involves teaching them how to redefine and reframe their pain. FM patients no longer need to spend years doctor shopping and undergoing multiple tests to rule out disease. They can be told they have FM, which is no longer a diagnosis of exclusion. Similarly, IAD is no longer a diagnosis of exclusion as the *DSM-5* clearly delineates its positive symptoms. Few imaging studies on IAD exist but what data are available suggest that patients with IAD may have volumetric abnormalities in the orbital frontal cortex, thalamus, and pituitary.^{15,16} As with FM patients those with IAD no longer need to go through extensive and sometimes invasive workups to exclude multiple other diseases as IAD is now a recognized one with positive symptoms.

In most if not all cases of IAD, the patient's primary doctor should continue to play an important role.⁵ Reasons for this the following:

- The primary doctor can schedule regular office visits if necessary (eg, every 3 to 6 months) to address the patient's ongoing concerns. Patients are advised to stick with one doctor rather than "doctor-shop" (go from one specialist to another).
- The primary doctor can help the patient decide if referral to a specialist is needed. This helps limit the number of tests with their potential problems and side effects.
- Relying on one doctor who knows the patient well helps reduce costs and risks of too many office visits and tests.
- Some people with IAD have severe psychological distress that needs treatment by a mental health professional. The primary doctor can suggest these services, making sure to clarify the reason for the referral and how it might help.

A number of empirically supported treatments have been developed for IAD. A coaching approach as advocated in the practice of lifestyle medicine may be more effective in the treatment of IAD opposed to the expert approach used in traditional medical care.¹² Mindfulness-based stress reduction has been shown to result in enhanced psychological hardiness, lasting decreases in physical and psychological symptoms, increased ability to relax, and greater ability to cope with short- and long-term stressful situations.¹⁷ Cognitive behavioral therapy (CBT) emphasizes the role of dysfunctional beliefs in maintaining illness anxiety and may be useful to instruct on how patients should respond to body signals.¹⁸

Pharmacotherapy such as a selective serotonin reuptake inhibitor may also be useful. (There is an OCD component to the disorder, or it may be a form of OCD.)¹⁹ The first randomized, controlled, double-blind trial comparing the efficacy of CBT, a selective serotonin reuptake inhibitor (paroxetine), and placebo in patients with IAD included 112 subjects and found that treatment with CBT resulted in better outcomes than treatment with paroxetine or placebo. (Response

rates: CBT 45%; paroxetine 30%; placebo 14%.) The short-term effects (4 months) and the long-term effects (5 years) of both treatments were compared to each other and to the placebo. It was concluded that both are effective treatments for IAD compared to the placebo in the short term, but the significant differences between active treatments in ameliorating symptoms disappeared over time. CBT, however, was more effective in decreasing comorbid depressive and neurotic symptoms during the follow-up period than the placebo. Furthermore, CBT resulted in less use of additional psychological or medical help during the follow-up.²⁰

In summary, IAD, as defined by the *DSM-5*, should now be diagnosed in terms of positive symptoms. There are assessment tools to help in making the diagnosis of IAD and in assessing illness severity. A lifestyle medicine approach using motivational interviewing, mindfulness-based stress reduction, and CBT may be effective in IAD treatment.

Acknowledgement

This work was presented at Lifestyle Medicine 2017, October 22-25; Tucson, AZ.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Ethical Approval

Not applicable, because this article does not contain any studies with human or animal subjects.

Informed Consent

Not applicable, because this article does not contain any studies with human or animal subjects.

Trial Registration

Not applicable, because this article does not contain any clinical trials.

References

1. Harper D. Hypochondria. In: *Online Etymology Dictionary*. <https://www.etymonline.com/word/hypochondria>. Accessed March 19, 2018.
2. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. Washington, DC: American Psychiatric Publishing; 2013.
3. Barksy AJ, Wyshak G, Klerman GL. Psychiatric comorbidity in *DSM-III-R* hypochondriasis. *Arch Gen Psychiatry*. 1992;49:101-108.
4. Reuman L, Abramowitz JS. Illness anxiety disorder. In: Phillips KA, Stein DJ, eds. *Handbook on Obsessive-Compulsive and Related Disorders*. Arlington, VA: American Psychiatric Publishing; 2015.
5. Cleveland Clinic. Illness anxiety disorder: beyond hypochondriasis. <https://my.clevelandclinic.org/health/diseases/9886-illness-anxiety-disorder-beyond-hypochondriasis>. Accessed March 19, 2018.
6. van den Heuvel OA, Mataix-Cols D, Zwitter G, et al. Common limbic and frontal-striatal disturbances in patients with obsessive-compulsive disorder, panic disorder and hypochondriasis. *Psychol Med*. 2011;41:2399-2410.
7. Goodman WK, Price LH, Rasmussen SA, et al. The Yale-Brown Obsessive-Compulsive Scale, I. Development, use, and reliability. *Arch Gen Psychiatry*. 1989;46:1006-1011.
8. Greeven A, Spinhoven P, van Balkom AJ. Hypochondriasis Y-BOCS: a study of the psychometric properties of a clinician-administered semi-structured interview to assess hypochondriacal thoughts and behaviours. *Clin Psychol Psychother*. 2009;16:431-443.
9. Pilowsky I, Katsikitis M. A classification of illness behaviour in pain clinic patients. *Pain*. 1994;57:91-94.
10. Kellner R. A symptom questionnaire. *J Clin Psychiatry*. 1987;48:268-274.
11. Salkovskis PM, Rimes KA, Warwick HM, Clark DM. The Health Anxiety Inventory: development and validation of scales for the measurement of health anxiety and hypochondriasis. *Psychol Med*. 2002;32:843-853.
12. Egger G, Binns A, Rossner S. *Lifestyle Medicine*. North Ryde, New South Wales, Australia: McGraw-Hill Books; 2007.
13. Stewart EE, Fox CH. Encouraging patients to change unhealthy behaviors with motivational interviewing. *Fam Pract Manag*. 2011;18:21-25.

14. Gracely RH, Petzke F, Wolf JM, Clauw DJ. Functional magnetic resonance imaging evidence of augmented pain processing in fibromyalgia. *Arthritis Rheum.* 2002;46:1333-1343.
15. Atmaca M, Sec S, Yildirim H, Kayali A, Korkmaz S. A volumetric MRI analysis of hypochondriac patients. *Bull Clin Psychopharmacol.* 2010;20:293-299.
16. Atmaca M, Yildirim H, Sec S, Kayali A. Pituitary volumes in hypochondriac patients. *Prog Neuropsychopharmacology Biol Psychiatry.* 2010;34:344-347.
17. Flowers S. *Mindfulness-Based Stress Reduction*. Woodburn, OR: American College of Lifestyle Medicine; 2014.
18. Williams MJ, McManus F, Muse K, Williams JM. Mindfulness-based cognitive therapy for severe health anxiety (hypochondriasis): an interpretative phenomenological analysis of patients' experiences. *Br J Clin Psychol.* 2011;50:379-397.
19. Drug.com. Hypochondriasis. <https://www.drugs.com/cg/hypochondriasis.html>. Accessed March 19, 2018.
20. Greeven A, van Balkom AJ, Visser S, et al. Cognitive behavior therapy and paroxetine in the treatment of hypochondriasis: a randomized controlled trial. *Am J Psychol.* 2007;164:91-99.