Integrative Medicine and the Long Hauler Syndrome—We Meet Again

“What remains in diseases after the crisis is apt to produce relapses.”

— Hippocrates, Aphorisms (400 BCE)

Integrative medicine (IM) has been attacked by some medical skeptics who point to a lack of systematic and comprehensive randomized controlled trials. Defined as healing-oriented medicine that takes account of the whole person including all aspects of lifestyle, IM emphasizes the therapeutic relationship between practitioner and patient, is informed by evidence and makes use of all appropriate therapies. Yet some believe that there is simply not enough evidence to incorporate lifestyle and other systems of medicine into our medical practice.

The onset of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic placed all physicians in the grip of an uncomfortable dilemma. In the absence of proven effective antiviral therapies and an approved vaccine, we are seeing evidence-based fundamentalists groping for answers as they seek to provide advice to their patients and to the community at large. Even recommendations that intuitively seem sound, such as masking, lack the degree of evidence that allows for confident proclamations. For example, the chief epidemiologist in Sweden has not recommended masks, citing a paucity of data.1 The scientific community is rightly mobilized, but what is the protocol while waiting for extensive and exhaustive testing? Is there a temporary lifting of the need for evidence-based medicine until then? What is the basis for these early recommendations?

The vast majority of individuals infected with SARS-CoV-2 develop mild-to-moderate coronavirus disease (COVID-19), yet the virus has demonstrated marked heterogeneity in host symptomology and target organ pathogenicity. Therapeutic and prophylactic options—including anti-viral therapy and vaccine development—are progressing at an amazing speed. In addition, the exploration of viral pathophysiological mechanisms continues, with most research focusing upon cytokine or bradykinin storm phenomena. Integrative medicine therapeutic options that can reduce the risk of becoming infected or increase the likelihood of a milder infection have been rapidly published, based upon evidence about other coronaviruses or similar respiratory viruses.2 Despite the aggressive development of acute therapeutic interventions with improved mortality rates, the care and treatment of the growing cohort of individuals dealing with persistent symptoms remains woefully inadequate.

An unanticipated sequela of COVID-19 is the high number of patients suffering from prolonged and diverse symptomology, including fatigue, mental fog, depression, and general malaise. This phenomenon is so widespread and common that it has been given a name: “long hauler syndrome.” In the largest study to date, looking at 1733 COVID-19 cases, 76% of individuals had persistence of at least one symptom at 6 months after illness onset.3 It is estimated that millions of people are suffering from long-term debilitating symptoms, even those who reportedly experienced mild cases of COVID-19.

Integrative medicine has been approaching this kind of uncertainty since its inception. It provides an approach to treating people with diverse symptoms—symptoms that often cannot readily be associated with specific pathophysiology and thus lack distinct, evidence-based therapeutic guidance. This includes the following conditions: fibromyalgia, chronic fatigue syndrome, small intestinal bacterial overgrowth, post-cancer fatigue, and neurodegenerative disorders, such as Parkinson disease and dementia. Rather than dismiss these patients out of hand, we consider therapeutic interventions that may provide pain relief or respite from chronic and debilitating conditions. We use principles such as reducing inflammation—a root cause of many diseases—and optimizing aspects of lifestyle, including a healthy diet and restful sleep, reversing autonomic nervous system dysfunction due to chronic stress, restoring a healthy microbiome, reducing environmental chemical exposures that may alter endocrine function, and more.

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Requests for reprints should be addressed to Randy Horwitz, MD, PhD, FACP University of Arizona College of Medicine, Andrew Weil Center for Integrative Medicine at the University of Arizona, P.O. Box 245153, Tucson, AZ 85724-5153.

E-mail address: randyh@arizona.edu

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An example of such a condition with applicability to COVID-19 infection is chronic fatigue syndrome, also known as myalgic encephalomyelitis or systemic exertion intolerance disease. Although a viral etiology has been proposed, no causative agent has been identified. Trials using pharmaceutical anti-depressants and stimulants have been disappointing. Patients are often left to fend for themselves to discover potentially helpful interventions, as many physicians are not willing to pursue other possible solutions. Integrative medicine, as a field, has been treating patients with post-viral fatigue for many years, and such an approach may benefit those with overwhelming post-COVID-19 fatigue.

In chronic fatigue syndrome, our approach starts with achieving restorative sleep. Utilizing sleep hygiene techniques, including ritualized sleep-wake cycles with dusk simulation, environmental bedroom and dietary modifications, and occasionally melatonin, we are often able to restore efficient sleep patterns, which in turn provide additional energy. Activity modification to preserve energy is also essential: activity is rationed daily, with ample recovery periods of napping or resting between graduated periods of normal daily activities. Exercise prescriptions are provided to build stamina and endurance, with 2-3 very brief, non-strenuous periods of movement per day. Exercise tolerance is built very slowly, with weekly increases in activity duration.

Persistent post-cancer fatigue, another common condition that is difficult to manage, also offers insight for long haulers. Controversy exists as to whether it is a side effect of cancer treatment or due to the cancer itself; it is experienced by 33% of breast cancer survivors for as long as 10 years. Integrative medicine practitioners bring a host of studied strategies to facilitate healing. They include a fatigue reduction diet (44% improvement in fatigue with a diet heavy in vegetables, fruits, whole grains, and omega-3 fatty acids), supervised exercise or yoga, exposure to morning light to restore circadian rhythm, and dietary supplements including melatonin, medicinal mushrooms, curcumin, L-carnitine, and ginseng.

Depression also appears to be common among COVID-19 long haulers. The combination of physiological and psychological stress (both prior to and after infection) is compounded by persistent and often debilitating symptoms. Both new onset depression and an exacerbation of pre-existing depression, have been seen in people infected by the virus. Depression can readily occur in individuals who are dealing with a new loss of independence, along with the belief that the incapacitating persistent symptoms will never abate. It is too early in the course of treating long haulers to determine whether pharmacological therapy is of use.

Integrative medicine can offer a range of therapies beyond the conventional approach of anti-depressants and talk therapy, such as dietary supplements, light therapy, and dietary alterations. Most of these practices offer broad salutogenic effects. Numerous studies reveal that physical activity can directly improve mood; it also protects from heart disease, cancer, and dementia. The same findings exist for the anti-inflammatory diet. Side benefits of omega-3 fats, a proven adjunctive therapy to anti-depressants, include a reduction in inflammation. S-adenosyl-methionine (SAMe) is a dietary supplement that can also be used to treat depression while improving detoxification by the liver.

Integrative medicine offers an approach to treating patients even before clinical trials are available, using established principles. It looks for the underlying mechanisms of a disease process, such as inflammation, and uses lifestyle modifications to address these (including nutrition, stress management, and reduced environmental exposures). Integrative medicine provides strategies to relieve symptoms such as fatigue and depression by extrapolating from treatment of these conditions due to causes other than COVID-19. It has an important role to play in this pandemic and can help a multitude of people restore their health and well-being.

Randy Horwitz, MD, PhD, FACP
Victoria Maizes, MD

aUniversity of Arizona College of Medicine, Andrew Weil Center for Integrative Medicine at the University of Arizona, Tucson
bUniversity of Arizona College of Medicine, Andrew Weil Center for Integrative Medicine at the University of Arizona, Tucson

References