Integrative Medicine—a new way forward amid the coronavirus pandemic

Is COVID-19 the quintessential example of a "lifestyle disease"? I can't take credit for that formulation—it's by one of my cherished mentors, Dr. Jeffrey Bland, considered by many the undisputed "Father of Functional Medicine".

Hearing that helped me coalesce a lot of thinking I've been doing during this prolonged lockdown. I've interviewed a number of luminaries in the field of integrative medicine during the crisis—here's a handy resource page for all my COVID-19 coverage.

Like many of you, I've been sidelined, unable to see patients in my office in Midtown Manhattan. Nevertheless, I've arranged to talk to some of my patients via phone or Skype. Many want advice about ways to fortify their immunity against the virus.

But presumably, a lot of my integrative medicine colleagues are experiencing business challenges, as bills for rent, insurance, utilities, and employee payroll keep rolling in, while revenues crater during the lockdown. Is there a way forward for practices like ours, or will discretionary preventive medicine services succumb like shuttered retail stores, eateries, and theaters?

Instead of feeling gloomy, I feel there's cause for optimism. Or, to echo the words of one of my astute colleagues, Cheng-Huai Ruan, MD, COVID-19 might call for *"Emergency Preventive Medicine"*—which sounds like an oxymoron, but stay with me.

The common theme that's becoming evident is that COVID-19 really *is* a lifestyle disease. Not in the sense that virtuous habits and plausible supplements will make you "bullet-proof"—there's ample evidence that if you violate reasonable social distancing guidelines, even the most disciplined lifestyle won't shield you from the pathogen.

But a new word has popped into our lexicons: "comorbidities". This little-used term designates those medical conditions that render people more likely to suffer the severe consequences of COVID-19. Not coincidentally, many of these are the very vulnerabilities that doomed Americans to premature debilitation and death prior to the onslaught of the coronavirus: obesity, hypertension, diabetes, liver disease, Alzheimer's, and cardiovascular disease. Their common denominator: They're all amenable to nutritional and lifestyle prevention. And, like COVID-19, none are curable with a conventional quick fix.

We're getting better at managing acute cases of coronavirus infection, and there are some promising drugs on the horizon. Less clear are prospects for a vaccine, which will likely take months or even years to be developed, and there's no guarantee

it’ll be effective, or that it won’t be harmful to some.

Meanwhile, some states are beginning to lift the lockdown, and we’re emerging into a new world fraught with risks. How can the integrative community address the gap left while we’re awaiting conventional fixes?

The pandemic has highlighted the need for optimizing metabolic and immune fitness. Integrative practices can become the vanguard of an effort to enact Emergency Preventive Medicine. Short of an elusive cure, here’s what we have to offer:

Yes, we can test patients for the coronavirus, and that might make sense, especially in hard hit localities like New York. But “I feel fine,” you might say. Well, consider this stark finding: In a recent study of young healthy women checking into a major New York City Hospital, only 2% had symptoms suggestive of COVID-19—and they all tested positive. But of the remaining women—who were asymptomatic—13.7% tested positive! And that means they were carrying *active* virus.

There may be a silver lining to that statistic. It suggests that lots of us—especially in hot spots—may already have been exposed inadvertently and have acquired immunity.

This brings us to the vaunted antibody tests, which promise a way out of lockdown by conferring “immunity certificates” to those already affected. And there may be some surprises here, because pilot studies are already showing significant double-digit percentages of sampled groups in affected areas have antibodies to the novel coronavirus—even among people who report no previous illness.

But these tests are controversial because it’s not yet clear how accurate they are, or even if accurate, what they mean. Are possessors of these antibodies immune to coronavirus? And if so, for how long? And what if the virus mutates, like the flu, and the virus we encounter next year differs substantially from the one now circulating? Will recovered COVID-19 patients be immune to COVID-21? And are the antibodies specific enough to be distinguished from the background immunity we might have acquired to last year’s head cold? These are questions that will only be answered by hard-won experience over months and possibly years.

So, absent definitive screening tests, what might a “coronavirus fitness” exam entail?

Metabolic fitness can be assessed by means of a body composition analysis, particularly the sensitive kind that can measure visceral adiposity—a key biomarker of insulin resistance (you don’t have to be fat to have insulin dysregulation, and you can be overweight yet maintain metabolic fitness).

A simple test called a hemoglobin A1c gives you a report card on blood sugar control. The Glycomark test alerts you to blood sugar spikes. Home monitoring is enabled by simple finger sticks, or better yet, continuous glucose monitors, which are becoming more widely available. You can learn how you react, in real time, to certain foods, exercise, or intermittent fasting.

Since inflammation appears to play such a crucial role in outcomes of COVID-19, it would be useful for patients to obtain an inflammatory panel consisting of sed rate and C-reactive protein, and perhaps IL-6, a cytokine that appears to be highly implicated in infection severity.

Sophisticated genetic tests can yield insights on what nutrients might best support your immune defenses—or tamp down a genetic susceptibility to overexuberant response

to coronavirus that might produce the cytokine storm that lands people on ventilators.

Patients might obtain a comprehensive immune evaluation which comprises secretory IgA, natural killer cells, helper/suppressor T cell balance, and IgG subsets. This panel could identify chinks in your immune armor that could be addressed with plausible nutraceuticals like vitamins A, C, E and D, mushroom extracts, astragalus, AHCC, or colostrum, to name but a few.

And while we're at it, let's test patients' vitamin D levels, which is a crucial determinant of who gets sick.

We need *precision prevention* that's every bit as science-based as the innovative tactics our front-line doctors are heroically implementing in ER's and intensive care units across the world. Already, plans are underway to formally study natural interventions for COVID-19.

So, if the threat of preventable degenerative disorders that are America's leading causes of premature death weren't enough to prompt people to address the lifestyle factors that put them at risk, maybe COVID-19 will be. While far less likely to kill you in the end, the threat seems more immediate—enough to give impetus to Emergency Preventive Medicine? I'd like to think so.