## Opinion Paper on COVID-19 Actions Based on Observation of Symptomatology and Early Mitigation of Same Using Simple Supplements

Teresa M. Heinichen-Owens RN, BSN, ACLS, ECRN, MS March 30, 2020

The Herbal Community has been monitoring COVID-19 from around the world for over two and a half months, reviewing patient profiles and autopsies, lab results and CT scans from other countries. Those of us with western medical backgrounds and training have noticed that, as each new piece of medical information comes in, it verifies what we, as Alternative Care Practitioners, believe we are seeing as well.

In order to reduce the in-patient surge that is inevitably coming, we need to keep patients at home. By closely following the current science, coupled with overwhelming anecdotal evidence and vast historical research, verification from the Traditional Chinese Medicine Practitioners and similar, we are certain that we have successfully identified a "very early onset of symptoms" pattern, that is being verified by information provided by the CDC and allopathic doctors on the ground in China, Israel, Italy, Spain, and New York, as new symptoms are listed for in-patients.

This list of symptoms could easily be taught to TeleHub staff, in-patient care providers, and home care nurses, so that patients could monitor themselves as they shelter in place, even without a positive swab test to verify. Front line workers could also begin monitoring themselves for very early onset of masked symptoms, even taking the very simple regimen of vitamins and supplements listed below, prophylactically, in order to protect themselves from contracting this infection.

We Herbalists and Alternative Care Practitioners, as a group, have seen great success in limiting and mitigating symptoms in patients of all ages, with identification of very early onset of masked symptoms and a simple vitamin/herbal/nutritional regimen of basic supplements and herbs that do not interfere with prescription medications, that would be easily accessible to all, that could even be delivered to homes by the various groups that are already delivering food and such. The TeleHub Team would be in charge of out-patient education and daily monitoring.

Having people self monitor, self treat - nothing recommended is overdose-able, addictive, or hallucination inducing - and experience only mild symptoms will, hopefully, provide herd immunity over time and prevent a devastating second and third spike in infections and deaths in the coming months, that is predicted by various models, to be inevitable.

## **COVID-19 Virus Behavior Analysis**

It appears that this virus "sneaks" around slowly infecting each body system it can, at low levels, so as to not alert the immune system. This behavior appears to provoke a nonspecific immune response, which causes mild generalized inflammation that can manifest in subtle ways depending on what each person is prone to, hence the "almost" or masked symptoms.

In other words, this virus appears to invade just a bit then back off; then moves somewhere else, invades, then backs off. In this way the virus can quietly affect small numbers of cells over a vast area, in multiple locations, using each infected cell to gradually increase viral replication and slowly build to overload, at the same time deliberately draining our immune system - which is why I think we are seeing neutropenia - significantly low white blood cell (WBC) count - as measured by laboratory blood tests – as the patient experiences the later stages of the disease process.

When they reach critical mass, the replicated viruses all signal each other to "attack" at the same moment, which is when rapid onset of obvious symptoms, followed quickly by the cytokine storm and resultant crash, occur. Now it is a medical emergency of epic proportions which western medicine has no tools to combat.

If we can identify and mitigate beginning masked symptoms from home, then prevent them from worsening, it will considerably ease the strain on the in-patient setting. This is just simple statistics.

First we need to understand the 3 phases of any infectious process. The following is a description of these 3 phases as put forth by Mimi Hernandez, RH(AHG), Executive Director of the American Herbalists Guild.

## Phases of Any Infectious Process

Alert or Beginning Phase: "Uh-Oh, Am I getting sick?"

This is when we can do the most good for ourselves with known herbal viral disruptors and immune support. By interfering with a virus's ability to replicate, from disrupting the agglutination -attachment- process to blocking the various channels a virus uses to insert itself into the cell, to thwarting transcription, replication and reassembly, to preventing release from the host cell, so that apoptosis - cell self termination that disrupts viral replication - can occur, there are many ways to minimize the viral load before it overwhelms the host.

At this time, gentle support of all potentially involved body systems is also indicated. Obviously we need to support the immune system directly, but we must remember that it works in conjunction with multiple other systems, as wellness is a whole body approach. So we must support the liver, the spleen, the lymphatic, skeletal, circulatory, respiratory, and gastrointestinal (GI) systems and tracts as well.

We must also nourish the excretory systems of the body as these are needed to remove the dead or denatured invaders, and spent WBCs. These include the kidneys/genitourinary (GU), GI, and respiratory tracts, as well as the skin.

Active Phase: "Man, I sure am sick!"

If we have missed the subtle symptoms of the beginning phase, we are now alerted to the fact that we are sick with increased intensity of symptoms: cough, fever, body aches, GI disturbances as our body attempts to ramp up the immune system to deal with the intensely increased viral load. Symptoms noted at this stage are being validated by clinical findings, from allopathic doctors around the world, with new symptoms being added daily.

3

Ramping up an already burdened immune system, or taking pharmaceutical medications that suppress symptoms without supporting the underlying body systems, is contraindicated at this point, and may actually increase severity of illness.

A better approach is to continue to gently support the immune system, combined with our choice of viral disruptors, in an attempt to decrease the viral load, so that our immune system can handle these increased demands, as well as to conscientiously address symptom relief. We do not want to eradicate symptoms because then we are accidentally suppressing our immune system, just when we need it the most.

Cellular health support is also vital at this time, as the cells themselves are at the epicenter of this invasion and need to be at their highest possible level of function. For example, we need to strengthen cell walls to help them resist viral invasion, support cellular health as our cells renew and regenerate themselves, improve cell transport and oxygenation, and maximize the cells' ability to self regulate apoptosis. Lymphatic, circulatory, and respiratory support are also needed, in order to assist in the circulation of WBCs, and oxygen to the cell and removal of denatured or dead viral material and spent WBCs.

Resolution or Final Phase: "Wow, I think this might actually be over eventually." We can think of this as the "taking out the trash" phase.

It is very important to continue to support all our body systems during this third and final phase. The body, as a whole, has been severely weakened by the onslaught. Our immune system is exhausted, hence the bone aches, as the majority of WBC's are created in our marrow. The liver and spleen are also depleted. Our body is still burdened by dead or denatured viral material and spent WBCs. Our cells have been challenged. We need to support our various excretory systems - lymphatic, circulatory, respiratory, GU, and GI, as they "take out the trash". Supplements, herbs, gentle, nutritious, warming foods and adequate hydration - warmed liquids and plain water - are needed to nourish all vital body systems. Large amounts of rest are necessary so that the body can use its energy to recover and regenerate.

At this time, the infection is thought to be a 28 day infectious process, but, masked symptoms may be occurring for several weeks prior to the Active Phase when the more obvious symptoms begin to manifest, so vigilance and daily maintenance are definitely required during all phases of this illness.

## "Almost" or Masked Symptoms:

Masked symptoms are symptoms that "almost" happen, that are easily mistaken for something benign and therefore appear unrelated, but occur in a cycle as the virus moves within, quietly infecting host cells throughout our bodies. It seems that these "almost" or masked symptoms occur when the viral load threatens to trigger an immune response but the virus then backs off, thus evading the immune system, and avoiding an obvious response, creating instead generalized, mild inflammation, which can easily be mistaken for something else. Meanwhile, the virus moves on to a new location to begin invading host cells in low numbers in another body system.

It appears this virus may be using the various "highways" throughout the body to travel about - integumentary, nervous, and lymphatic systems - largely undetected by the immune system. When the number of infected host cells reaches 'critical mass', it is thought that the virus signals all its replicated material to burst forth at once, causing the patient to deteriorate rapidly and the immune system to mount an over-response, which can trigger a cytokine storm that overwhelms and can kill the body.

This idea of overwhelm is based on the multi-system abnormal lab results noted on autopsy, especially evidenced by extreme neutropenia, as the immune system rapidly exhausts itself attempting to deal with the sudden, massive viral attack that seems to come out of nowhere.

It appears that the initial stage of infection happens over a period of weeks to months, with low level masked symptoms slowly increasing in frequency as the viral load increases. This behavior can also account for the large amount of false negatives on testing and the hypothesized concept of 'asymptomatic' cases. This virus is very insidious and good at hiding itself until the critical moment of release.

Not all patients will exhibit all symptoms. Assisting the patient in learning to correctly identify their own individual pattern of "almost" or masked symptoms is key to overall mitigation so as to keep the patient at a mild to moderate level of illness that does not require hospitalization.

#### Neuro:

- random sharp head/neck aches, especially upon waking, unrelieved with standard OTC pain meds, but often reduced or relieved after defecating, especially if one is prone to headaches or migraines
- beginning feelings of nerve sensitivity that mimic HSV (Herpes Simplex Virus), shingles, or Bell's Palsy nerve pain which follows the same nerve pathways, and spontaneously resolves
- sporadic dizziness or lightheadedness, especially if one is prone to such

### Musculoskeletal:

- random, unusual achiness such as upper arms hurting as if one has been working out, strained a muscle, or "slept wrong"
- sore joints elbows, knees, hips that mimic muscle strain, or chronic pain patterns
- sore feet as if one had been standing for long periods when one has not
- sometimes these pains last up to 7 days, unrelieved by pain medications
- an uptick in chronic pain patterns if one has a history of such

## **EENT:**

- watery or itchy eyes that randomly come and go and mimic seasonal allergies
- pink ringed eyes or eyelids with clear sclera, "flu eye" as noted repeatedly by nurses at the Life Care Center in Washington state, or conjunctivitis symptoms
- sinus and ear canal congestion that mimics seasonal allergies
- beginning sinusitis/rhinitis/sore throat that spontaneously resolves
- occasional apparent loss of smell or taste without any cold symptoms

## Skin/Integumentary system:

- random skin symptoms: unexplained hives, acne, dyshidrotic eczema, or areas of sensitivity, that come and go
- uptick in HSV outbreak "almost" symptoms sensitivity, pain, threatened or beginning lesions of the lips/mouth, gums, genitals, rectum if one has a history of such, relieved immediately by one L-lysine
- random ragged cuticles
- uptick in hair loss, that can easily be mistaken for hormones changes or aging

#### Cardiovascular:

- random periods of slightly elevated or forceful heartbeat unrelieved by prescription medications, often accompanied by periods of hypertension, especially if one has a history of such, and despite one normally having good BP control on those meds

## Respiratory:

- random passing episodes of shortness of breath or tightness after normal daily activities
- random sharp chest wall pains following the intercostal muscles
- occasional dry cough, rarely accompanied by very small amounts of very thick glue-like white or slightly cloudy sputum that is difficult to expel
- slight feelings of discomfort on the posterior bases of the lungs with no sign of respiratory distress, often mistaken for back pain, especially if one has a history of such

## GU:

- random increased urination unrelated to drinking extra fluids
- "almost" UTI symptoms that spontaneously resolve

- slight feelings of discomfort over the kidneys without any urinary symptoms, again mimicking back pain

## GI:

- random feelings of abdominal fullness, especially the upper abdomen, right or left sided or both, unrelated to eating, due to liver and spleen involvement
- random periods of lower GI bloating or flatulence (gassiness)
- mild diarrhea or constipation that can be easily mistaken for poor eating habits, or normal stools that are difficult to move, especially if one has a history of such
- rotating, random, sudden episodes of extreme hunger or loss of appetite through the day

## Reproductive/Fever:

- hot flashes, sometimes with diaphoresis (body sweats) that come and go, frequently accompanied by preceding periods of "feeling chilly"
- feelings of beginning yeast infections that do not manifest

#### Misc:

- periods of sudden unusual overwhelming tiredness; of needing a nap "right now" unrelated to activity levels
- uptick in chronic autoimmune or HSV (Herpes Simplex Virus ie shingles, cold sores or similar) symptoms if patient has a history of such

# Recommended Course of Prophylactic Treatment and Mitigation of Symptoms

The following is anecdotal evidence gathered from interviewing a sample group of 50 volunteer "patients" none of whom have been tested for COVID - 19, and have no clear contact with an infected patient, but who all have reported feelings that "something is going on".

The herbal community, born out by current nutritional science, reports the same basic things work best, rotated throughout the day, as different masked symptoms or generalized inflammation threatens to happen.

Each time an "almost" symptom begins, this sample group of patients reports that relief is clearly noted within 20 minutes of taking one of the various recommended supplements, on this list as directed on the bottle. EVERY TIME.

There are multiple herbal protocols put forth by several of our most esteemed Herbal Educators. I myself have an herbal protocol, similar to several listed elsewhere. What I would like to put forth in this paper, however, are four simple supplements that any average person can readily access. All four of these supplements are scientifically shown to support general body system health and vitality.

\*\*Remember that not all herbs are right for everybody, and that some do interact with prescription medications. This list is the most benign, least interactive list of herbs that I could compile. If you have concerns though, do research whatever you might choose to take\*\*.

**Vitamin C:** used by the body in at least 300 identified metabolic functions including healthy tissue growth and repair, adrenal gland function, healthy gums and mucous membranes; aids in production of anti-stress hormones and interferon, an important immune system protein; protects against infection and enhances immunity. Studies suggest that Vitamin C can support lung health and may reduce asthma symptoms. Works best in conjunction with both Vitamin E and beta carotene.

Food Sources of Vitamin C: citrus fruits and juices (OJ needs to be fresh squeezed or non-pasteurized, fresh or frozen), berries, green veggies such as asparagus, broccoli, dandelion greens, kale, spinach, Swiss chard, green peas, onions, cantaloupe, sweet peppers, strawberries.

Interestingly, several culinary herbs are also high in Vitamin C. These can be used fresh or dried: cayenne, fennel, fenugreek, peppermint, onion, paprika, parsley.

Tea or herbal supplements that are high in Vitamin C include: Alfalfa (*Medicao sativa*) -can also be sprouted; Burdock (*Arctium lappa*) -also know as Gobo Root in Chinese cooking; Chickweed (*Stellaria media*); Eyebright (*Euphrasia officinalis*); Hops Flowers (*Humulus lupulus*); Horsetail (*Euisetum arvense*); Kelp (*Fucus vesiculosis*); Mullein (*Verbascum thapsus*) Nettle (*Urtica dioica*), Oat Straw (*Avena sativa*); Pine Needle (*Pinus spp.*); Plantain (*Plantago major*); Red Clover Flower (*Trifolium pratense*); Raspberry Leaf (*Rubus idaeus*); Rose Hips (*Rosa canina*); Skullcap (*Scutellaria spp.*) specifically Chinese Skullcap (*S. Baicalensis*) appears indicated as a multi-level viral inhibitor as well; Violet Leaf (*Viola odorata*), Yarrow (*Achillea millefolium*), Yellow Dock (*Rumex crispus*).

The following is a link to a study detailing the successful use of high dose IV Vitamin C in treating even the most severe cases of COVID-19. Although this is not a vetted, double blind study, high dose Vitamin IV Vitamin C has been recommended as far back as the 1990's, to enhance post surgical healing and early extubation, even with patients with history of chronic lung ailments.

https://www.greenmedinfo.com/blog/shanghai-government-officially-recommends-vitamin-c-covid-19.2

**Stinging Nettles (***Urtica dioica***):** contains multiple phytochemicals and nutrients including B and C vitamins, Copper, Iron, Magnesium, Potassium, and Zinc. Known to be an expectorant, a pain reliever, and tonic. It is supportive to the lungs especially in the presence of excess mucous, to the kidneys, the joints, and for malabsorption syndromes, and general inflammatory conditions. Stinging Nettle has been noted to assist with chronic pain symptoms when applied topically in the form of a wash (water extraction) or tincture as well.

The following is a link to a study detailing the successful use of Stinging Nettles to treat COVID-19 in mice. Again, one small study that has not yet moved forward to the next stage of human clinical trials, but there is really not time to run 3-6 months of double blind studies at this point. Stinging Nettles are a very simple, safe plant that can be used by any patient, regardless of age, health status, or prescription medications. Literally thousands of years of human clinical trials show this to be true.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3085190/?fbclid=lwAR0yLsrJrtrxJVndHfIYHva-QAgolxPMbxK6I-4GLBgo2qtxh6WM5O-AvX8

**Turmeric Root** (*Curcuma longa*): known to contain multiple phytochemicals including curcumin, a powerful antioxident, that fights free radicals, protects the liver and other body tissues against toxins, aids circulation, combats generalized inflammation, and improves blood vessel health; has been shown to inhibit the spread of certain viruses such as HIV in laboratory tests, and to aid in cellular health by enhancing the energy transport mechanism of the cell benefiting Cystic Fibrosis patients, who suffer from genetically linked lung inflammation. Curcuminoids also appear to have properties that block gene expression - RNA transcription - which leads to tumor formation in cancer patients, and may also be a viral disruptor. This plant has over 4000 years worth of documented 'anecdotal evidence' now backed by modern day scientific studies, as to its efficacy as a generalized anti-inflammatory agent, and viral disruptor.

https://www.ncbi.nlm.nih.gov/books/NBK92752/?fbclid=lwAR0m5CjQNdwk8udltJmh1Mb8znBntmWyYAfOqkGVQE6lp2ZS6-ApegovDIA#!po=15.9091

**L-lysine:** an essential amino acid – meaning the body cannot produce this for itself, one must ingest this amino acid in order for the body to have what it needs – that is a necessary building block for all protein. It aids in calcium absorption, which supports bone health, where the majority of our WBC's are born - and maintains proper nitrogen balance. Vital for the production of antibodies, hormones, and enzymes, helps in collagen formation in tissue repair. Known to be very useful, especially when taken with supplemental Vitamin C, in aiding the body to combat cold sores and other herpes family (HSV) viruses.

Food sources of L-lysine: cheese, eggs, fish, lima beans, milk, potatoes, red meat, soy products, and yeast.

https://www.drugs.com/npp/lysine.html?fbclid=lwAR0o\_RYBlztyB5fVDhf77PRSFzVos6KknvBcecgBo5oQxNZWRJVdo64CBoU

Vitamins, A, E, and Zinc can also be very useful to manifest new cell growth, and recovery from cell damage, enhance immune system function, and assist epithelial tissue to support the skin and mucous membranes.

### Conclusion

In short, it has been observed by multiple practitioners from various disciplines that early identification of masked symptoms, coupled with consistent, basic treatment can minimize the severity of this viral experience and is indeed vital to mitigating symptoms and reclaiming wellness, which will allow for a basic herd immunity. At the very least it will create a bridge until a vaccine is available.

## **Bibliography:**

- 1. Balch, P. CNC; <u>Prescriptions for Nutritional Healing</u>; Penguin Books, Ltd.; London, England; 2006; p. 58-59, 67, 123, 349.
- 2. Clearwater, S. RN, BSN; <u>The Art of Herbal Healing</u>; Green Turtle Publishing; Nashville, IN; 2018; 515-522.
- 3. Grieves, M.; <u>A Modern Herbal</u>; Tiger Books International PLC; Twickenham, England; 1998; p. 574-574.
- 4. Hernandez, M. RH(AHG); <u>The Community Herbalist Lecture series</u>: Lesson #4, The Winter Herbalist. 2013.
- 5. Holmes, P.; <u>The Energetics of Western Herbalism</u>; Snow Lotus Press, Inc.; Boulder, CO; 1993; p. 439-441.
- 6. Marieb, Elaine N. RN, PhD, <u>Human Anatomy and Physiology</u>, 5<sup>th</sup> <u>Edition</u>; Benjamin Cummings, Pearson Education, Inc.; San Francisco, CA; 2001 Chapters 3-26.
- 7. Pedersen, M.; <u>Nutritional Herbology: A Reference Guide to Herbs</u>; Whitman Publications; Florence, AL; 1998; p. 125-126, 164-165.

## **Web References:**

1. Hansen, Dr. M, MD; Coronavirus Autopsy Report Analysis (2020, Feb 21) Retrieved from:

https://www.youtube.com/watch?v=V-7SQGPkijs&fbclid=lwAR2bfLwU0yn0GsSD4nqEBaf\_fOJeGGhTxVJmdU1fhZyXB 1VexmTGu7kbM7E&app=desktop

**2.** Kumaki, Y., et al; Inhibition of severe acute respiratory syndrome coronavirus replication in a lethal SARS-CoV BALB/c mouse model by stinging nettle lectin, *Urtica dioica* agglutinin; (2011, Feb 19) Retrieved from:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3085190/?fbclid=lwAR0yLsrJrtrxJVndHflYHva-QAgolxPMbxK6I-4GLBgo2qtxh6WM5O-AvX8

- 3. L-lysine Medical Review (2020, Jan 22) Retrieved from: https://www.drugs.com/npp/lysine.html?fbclid=lwAR0o\_RYBlztyB5fVDhf77PRSFzVos6KknvBcecgBo5oQxNZWRJVdo64CBoU
- 4. Prasad, S. and Aggarwal, B.; Turmeric, The Golden Spice (2011)
  Retrieved from:
  <a href="https://www.ncbi.nlm.nih.gov/books/NBK92752/?fbclid=lwAR0m5CjQNdwk8udltJmh1Mb8znBntmWyYAfOqkGVQE6lp2ZS6-ApegovDIA#!po=15.9091">https://www.ncbi.nlm.nih.gov/books/NBK92752/?fbclid=lwAR0m5CjQNdwk8udltJmh1Mb8znBntmWyYAfOqkGVQE6lp2ZS6-ApegovDIA#!po=15.9091</a>
- 5. Saul, A., Shanghai Government Officially Recommends Vitamin C for COVID-19; (2020, Mar 4) Retrieved from:

https://www.greenmedinfo.com/blog/shanghai-government-officially-recommends-vitamin-c-covid-19.2