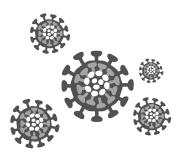
The Role of Chinese Medicine in the COVID-19 Epidemic

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NATIONAL UNIVERSITY OF NATURAL MEDICINE, COLLEGE OF CLASSICAL CHINESE MEDICINE A special thank you to Secretary Liu Yi for coming online to greet me tonight! I feel deeply honored for the special invitation by my *alma mater* to deliver this online presentation. Therefore, I want to begin by welcoming the administrators, teachers and colleagues at Chengdu University of Traditional Chinese Medicine and Pharmacology—good evening everybody! Other participants present online are my colleagues from the online platform *Dajia Zhongyi* (Chinese Medicine Family), as well as members of *Qi Huang Wang* (Online Forum for the Science of Qi Bo and the Yellow Emperor), including many viewers abroad—heartfelt greetings to you, as well!

The Journey to Wuhan

I wish to share with you this evening the clinical impressions of our team, starting with an introduction of Dr. Lei Ming, who graduated from Chengdu University of TCM in 1981. She and I arrived in Wuhan together in the evening of February 21. Another team member is my former graduate student Dr. Zhao Jiangbin, who arrived from Nanning a day later. The three of us came here in the capacity of a fact-finding team for our Tongyou Sanhe Foundation for the Development of Chinese Medicine. But as was just pointed out by Secretary Liu, we are not part of an official government response team, which has made the process of getting to the front line extremely cumbersome. I originally pursued several promising contacts, one being the president of Guangzhou University of TCM, Wang Shengliang, since I am now retired from my professorship at Guangxi University of TCM. But despite much effort, going the Guangzhou route didn't work out. Then I tried to create a pathway via Tang Nong, president of Guangxi University of TCM, and for a while everything looked as if this was

a feasible solution. The necessary paperwork had been all but approved by the Ministry of Chinese Medicine, and myself and my team were almost sent to the city of Guilin. But again, for a variety of reasons, this avenue did not come to fruition, either. Therefore, it looked to us as if there wasn't much hope for our participation at the front line. Then, however, a passionate colleague and volunteer from Hubei contacted me unexpectedly, saying that he would take care of our passage to Wuhan. Finally, we received an official letter of invitation by the city's Jiang'an District. At the very beginning, we were quite ignorant of the conditions at the "front"-I am going to use this term here for lack of a better word-and thus decided to first send a three person team for a fact-finding mission. I want to use this opportunity here to extend a special thank you from the three of us to Liu Huanhua, who acted as a middleman during the difficult maneuvers that finally got us here!



What on earth makes a Chinese medicine physician so eager to get to the front line of this epidemic? I completed my graduate studies in 1978, a few years ahead of Dr. Lei Ming. Dr. Zhang on our team graduated quite a bit later. As a Chinese medicine scholar, I have made it my habit to contemplate most phenomena from a Chinese medicine perspective. Those of you who know my work have seen that tendency in my book Sikao zhongyi (English title: Classical Chinese Medicine). In my eyes, Chinese medicine is an extremely valuable thing, an extraordinary science, and I have been wondering for years why it has encountered such enormous difficulties in our time. Our team was just discussing this question earlier today, since Dr. Lei Ming's daughter is a student of TCM who just graduated from university. The current situation of our field is such that many people who graduate from a TCM program in China end up changing their career and terminate all activities in the domain of Chinese medicine; or they continue to work under a Chinese medicine physician license, but are not using traditional modalities anymore. In my book I used the following expression to describe this situation: "The body is in the camp of Cao Cao (155-220), but the heart is with the army of the Han;" meaning that although such a person is working in a Chinese medicine hospital, perhaps even a top-level

provincial hospital, the work administered is entirely in the field of Western medicine. Based on what I have heard, this sort of situation is now even more common than when I first wrote about it in my book. Why is it that people who started out by studying this formidable medical system, some as early as their senior year at the university, contemplate to change their profession? Whenever I hear this kind of news I get depressed. Therefore, I wish to make good use of my opportunity tonight to encourage all Chinese medicine viewers, through the sharing of our experience, to deepen their belief in the efficacy of our medicine. This is how it should be, since the system of Chinese medicine works exceptionally well, indeed!

In my time, we always thought that Chinese medicine is effective for all kinds of clinical problems. I have spent a lot of time learning from my mentor Lu Chonghan, Professor Emeritus at Chengdu University of TCM, since I first became his disciple in 2006. Time and again I have seen him turn around difficult cases and save their lives. I often say, when there are patients beyond hope of recovery, as long as you give Shifu the necessary time he will be able to heal most of them. So, we know that Chinese medicine really works. But why, then, has our field deteriorated into this kind of situation? In the past, of course, we have rarely been confronted by this kind of epidemic. During the SARS outbreak in 2003 I was at Qinghua University in Beijing as a visiting scholar. At the time, I heard someone say that Dr. Lu wanted to participate in treating patients at the front line of the epidemic, but nobody ever dispatched him there, despite the fact that he was still actively working at a government university. It must have been because he wasn't a member of the Communist Party.

The question that arises is the following: if Chinese medicine can take care of normal issues, including more difficult issues like chronic and recalcitrant diseases, even tumors, then how about this kind of acute infectious disease, this epidemic in front of us? Does it work for that? At the time of the SARS outbreak, treatment was primarily the business of Western medicine, and Chinese treatment approaches didn't get added until the middle and late stages of the official response. Can Chinese medicine, therefore, participate in such an extraordinary situation? And if yes, then what is its role and efficacy? If it can be shown that Chinese medicine does work for this sort of problem, I believe there is no more reason for people to think that Chinese medicine is not a real science and then go on to change their careers. If anything, the issue then becomes that we haven't learned this science well enough, or that our teachers didn't instruct us well enough. That is the main reason why, as a Chinese medicine practitioner, I wanted to go to the front line, to see for myself.

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The Nature of the Disease

Before approaching the front line myself, I kept thinking about the nature of this disease, and even published a number of blog posts on the topic of how to understand and prevent this disease. This disease, of course, would be called yi 疫in the terminology of Chinese medicine-pestilence. Chinese medical classics, such as the "Simple Questions" (Suwen) portion of the Yellow Emperor's Classic of Medicine (Huangdi neijing) and the Treatise on Disorders Caused by Cold (Shanghan lun) already offered an extremely sophisticated assessment of this type of disease millennia ago. Since the beginning of this outbreak I have been reading over and over chapter 72, entitled "Treatise on Needling Methods" (Cifa lun), in the Yellow Emperor's Classic, as well as the chapter entitled "Cold Disorder Categories" (Shanghan li) in the Treatise on Disorders Caused by Cold, essentially the entries right before the chapter on Taiyang Disorders. Generally, we don't pay much attention to these chapters in TCM education. However, after reading and mulling over the content of these chapters again and again, I found that our ancestors already described the basic nature of the disease we are facing today. For instance, on the subject of what kind of conditions need to be present for the outbreak of an epidemic, the Yellow Emperor's Classic states: "When two types of deficiency encounter each other they will pathologically effect the body" (兩虛相 得乃客其形). What are these two types of deficiency? One is the internal type (neixu), often referenced in passages elsewhere that say "when righteous qi is strong on the inside, pathogenic influences cannot invade from the outside" (正氣存內邪不可干). The other type of deficiency referred to here is an external deficiency (waixu). What is meant here by this external deficiency? It is what both of the classics in question refer to as "unseasonal qi" (feishi zhi qi). For instance, winter is normally supposed to be cold, but during a certain year the weather may be warm instead. Or, spring is normally supposed to be warm, but now it

is cold. These kind of abnormal climate conditions create the external terrain for the development of an epidemic. The external conditions, of course, will still exert influence on the body's ability to defend itself. The epidemic pathogen, after all, can only invade a system when its defenses have become compromised. In addition to these two deficiency factors, the Classic speaks about "invasion into the body", referring to the presence of epidemic toxins (yidu) as another prerequisite for epidemic development. The concept of this particular type of "toxicity" is clearly discussed in chapter 72. The most relevant sentence in this chapter is the aforementioned "when righteous qi is strong on the inside, pathogenic influences cannot invade from the outside," followed by "toxic qi must be evaded" (避其毒氣).

I am going to remove my face mask for a little bit so that everybody can see me. The rules here are such that if there are more than two people present everyone must wear masks. There are a few other people in this room, so I am asking them to sit a bit farther away while I have my mask off. Otherwise, it is a bit hard for me to keep talking while my face is covered.

So where is this "toxic qi" coming from? The Classic goes on to say "it enters by way of the tianpin" (天牝從來). The unusual term tianpin used here is an ancient word for nose. If we conservatively assume that this chapter was created sometime during the Eastern Han dynasty (25-220 CE), it is quite an astonishing achievement for scholars of that distant time to recognize that epidemics get transmitted in this way. This insight differs in no way from our modern understanding. They may have not been able to further differentiate the type of virus, but they recognized it as a type of "toxic qi" (duqi), a term equivalent to our modern term for virus (bingdu). It wasn't, therefore, until the late Ming dynasty 400 years ago that Chinese medicine physicians first understood the nature of virulent epidemics, this was already clear many centuries earlier at the time when the Yellow Emperor's Classic came into being.

What does this information mean, now, for Chinese medicine physicians facing this current epidemic? I have been thinking about this for a while now. That is why I already wrote a series of recommendations before I even came to Wuhan, mostly from the perspective of how to prevent the disease. I would like to remark at this point that I think extremely highly of Western medicine and its physicians. Our Western medicine colleagues on the front line have done much more than us and made enormous sacrifices. They were, after all, the first responders at the very beginning of the outbreak. I have heard from my friend and student, the author Liu Liu who wrote about conditions at the front lines, that particularly when it came to applying life-saving measures, those doctors, like the team from Shanghai, just kept adjusting and updating their approach, and thus greatly reduced the death rate in critical patients. This is indeed praiseworthy! Their team also excelled at providing preventative advice.

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The Role of Chinese Medicine

So, once again, what kind of role can we play as Chinese medicine doctors in this situation? Everybody knows that this time around we are dealing with the so-called coronavirus. Western medicine currently has no remedy to directly tackle this novel and suddenly erupted virus with any of its modalities. Methods that have been developed in the past to treat other types of viruses have not worked well in the fight against this one. At the same time, the development of a vaccine for preventative purposes is still a while away. Current Western medicine methods to treat this disease have therefore been fairly reactive in nature. At the very least we can say that the anti-viral remedies suggested in what is by now the 7th edition of the government recommended treatment plan are typically used for ten days. After that, they will produce certain side-effects, while on the other hand no more benefits can be observed. Most patients, however, are not cured of the disease after ten days. So, these kinds of drugs are used again, and of course, if the patient has by now entered a more critical stage, life-saving emergency measures are employed. But what if the patient hasn't reached this kind of severe stage yet? This is precisely where I think the unique advantage of Chinese medicine lies. As practitioners of Chinese medicine, after all, we do not need to know the precise type of virus we are dealing with. How then, does Chinese medicine determine the etiology of this disease? Certainly not by differentiating the corona nature of this virus. But this doesn't mean at all that we cannot treat the COVID-19 type of pneumonia caused by this virus. We definitely can!

But how do we formulate our treatment approach? Chinese medicine, as we know, has its own system of differentiating the etiology of disease, however different it may be from the diagnostic classifications of Western medicine. While our medicine does not talk about the coronavirus, it knows that this is caused by a kind of "virulent qi" that has the capacity of severely harming people, and what should be done once people have become afflicted. How can we regulate the functions of the human body to help it through this crisis? In essence, what is the secret treasure of Chinese medicine? As my colleagues and hopefully also the students from Chengdu University of TCM know-I was once a student, after all, myself-the essential treasure of our medicine is the unique system of a treatment approach based on differential diagnosis (bianzheng shizhi). Truly a treasure! So, once again then, how do we find out the reasons for the development of this disease? This examination happens via the process of differential diagnosis we have all learned to administer, followed by a treatment design that is based on the energetic cause we determined. In sum, as long as the patient exhibits any kind of external symptoms, and as long as I have felt the pulse and looked at the tongue, I have all of the information I need. Our medicine does not operate in such a way that if we don't know the exact nature of the pathogen we are dealing with, then we then don't know how to proceed in the clinic. The above process gives us all of the information we need to design a treatment, including both the modalities of acupuncture and herbal medicine.

So far, it has been the biggest regret of our team that we didn't have the opportunity to treat more people so far; and that we didn't have a chance to observe and treat patients in the careful and detailed manner we would have chosen under normal circumstances, since we were restricted in many ways. As a grassroots medical team that came here in no official capacity we encountered many obstacles. Fortunately, we were also blessed with luck! Why did the next team we had organized in advance not get a chance to participate? Because without a bit of luck, you apparently don't get to promote the cause of Chinese medicine in this type of situation yet. The first three of us, however, were lucky. This is because we were invited by the administrators of Jiang'an District, who sent us to People's Hospital No. 8. This hospital used to be a facility for the treatment of anal and intestinal disorders, which got converted into a hospital

later. Specifically, we were sent to the Hospital's Hemorrhoid Department No. 3. The department provided us with excellent conditions. Starting with the chief, Dr. Wang Peng, the vice-chief Dr. Zhang as well as their colleagues, we were welcomed with open arms. I should add, however, that this was not so at the very beginning. You need to understand that in the busy environment of a hospital, with multiple shift changes of personal and anesthesiologists coming and going, any outside presence can easily cause chaos. In addition, their own personal and material resources were not enough to cope with the emergency, things were lacking on all fronts. It was like working at a conveyor belt production line, with people from other departments coming in for a few days, then leaving again. In the beginning, we were looked upon as a distraction. at best.

Such is the nature of our status as Chinese medicine physicians. I want to encourage both my colleagues and especially the students among us in the strongest possible terms to not get dejected by this situation. All three of us, plus the person who managed to send us here, do not think of our Western medicine colleagues as unreasonable, but know that they are trained to look at facts. We strongly believed that if given a week, or even less than a week, we could convince our Western medicine colleagues that our work has real clinical value. We deeply trusted in this outcome. Why? Because we knew that our medicine really works. If others are presented with factual results, they will also acknowledge that it works and come to think of it as an extraordinary form of medicine.

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Combining Acupuncture and Chinese Herbs

As you know, I have shared my understanding of this epidemic in various forms before, supported by my mentors whom I called almost daily to ask for advice. For herbal approaches, I asked Dr. Lu Chonghan, and for acupuncture questions my other mentor, Yang Zhenhai. The only reason that I can use needles is because of my studies with him, specifically the technique called Huangdi Neizhen—the Yellow Emperors Inner Needling Technique (laid out in detail in the just published English language book, *The Yellow Emperor's Inner Transmission of Acupuncture*). This is why I have time and again recommended the combined application of herbal medicine and acupuncture for the treatment of this disease. There is a simple reason for this: The *Discourse on Disorders Caused by Cold* has already provided us with a fairly accurate outline regarding the way how this disease progresses from one channel system to the next within the 6-conformation system of Chinese medicine diagnostics. The use of needles is also included in this 6-layer system provided by the *Discourse*. Zhang Zhongjing was a great master, indeed—we should all go back to his work and study it more!

I thus arrived at the front lines with the backing of these two master practitioners in their respective fields, feeling encouraged and full of confidence because of their guidance. When we first arrived in Wuhan on the evening of February 21, however, we got goosebumps. First of all, nobody at all could be seen on the streets. The only people we did see were covered from head to toe in white hazmat suits, stopping every car trying to go into the city and preventing almost everybody from going through. Our hearts sank in an instance-I would be lying if I'd say that we weren't afraid! In addition, the hotel we were checked into was cold-we weren't allowed to use the heating function of the air conditioner, and the comforter was too thin, so we slept in our clothes. The next two days were spent learning how to correctly put on and wear the protective gear-not so easy for an old Chinese medicine doctor who is not used to such complexities and who has two klutzy pairs of hands and feet. This was the first order of business.

In the afternoon of the 24th we then entered into the COVID-19 ward that had been set up by the Hemorrhoid Department. At the time, there were about 20+ patients present. We chose more than ten of them, based on the following conditions: prospective patients had to exhibit both obvious signs of discomfort and a certain degree of severity. We were hoping to have a chance to work with those patients rather than those who only exhibited mild symptoms or no symptoms at all. Furthermore, all of them had to be willing to receive Chinese medicine treatments. Some of the patients in this hospital, after all, were not familiar with our medicine, at all. Once we had chosen our 10+ patients, we were faced with the fact that we were flying blind with regard to Chinese herbs, since there was no existing pathway for the preparation and administration of herbal decoctions at the hospital. The herbs had to also be procured from somewhere.

We therefore contacted two entities to help us: One of them was the company Jincao Zhongyi (Golden Herb Chinese Medicine). They happened to have a fairly large clinic in the Hankou district of Wuhan, containing professional boiling equipment for the preparation of herbal decoctions. I was happy that we found such a facility nearby, and contacted this particular branch office via their national president, Mr. Hao. They had quite a few herbs, but not many of them in the quantities we needed. We therefore also contacted Tianjiang Pharmaceuticals in the city of Jiangyin, to see if they were willing to provide us with concentrated herbal granules. For a while, however, none of these efforts went very far, since every single business in and near Wuhan was shut down. To ask them to reopen just for us was not such an easy thing, as you can imagine. It requires lots of paperwork and permits. Once you have those, finally, a volunteer can go and pick up the requested medicines. So, for the first few days we didn't have access to any medicinal items, and could only bring our needles into the patient ward. At the same time, we were wearing all that protective gear and had to walk up all the way to the 5th floor with that. The department chief told us that using the elevator would be too dangerous due to aerosol particle density in such a cramped space-quite scary, really! We thus walked upstairs, and by the time we got to the top we were quite out of breath, a bit like gi deficient patients.

Then, finally, we started to see patients—in a manner completely different from how we normally go about diagnosing and treating someone. Considering the circumstances, it was not really easy to do our usual thing, by gaining an initial impression of the patient and then apply the standard diagnostic procedures of looking, listening and smelling, asking questions and palpation. What first opened the door to clinical success, therefore, was this little needle. Upon questioning, people said that they were experiencing a wide range of discomfort. Many were on oxygen, and thus suffering from stuffiness in the chest, obstructed breathing, shortness of breath, panicky emotions, or sudden bouts of spontaneous sweating, or abdominal discomfort, etc. etc. So, we put our needles to work.

I very clearly remember when I needled my first patient on this ward, with the protective gear being in the way. You are required to wear a mask that encases your entire face, which has a tendency to easily come loose if you don't know what you are doing. You therefore cannot see the exact location of the points very clearly. At the same time, of course, you have to be extremely careful not to prick yourself. The director had admonished us to wear not one but three layers of gloves to prevent needle pricks. But once the needle was in place for this patient, who experienced pronounced symptoms of stuffiness in the chest-at the point Neiguan (PC 6), traditionally said to govern the chest and abdomen-he appeared spooked by the immediacy of his response: How come that his chest had opened up right away? He couldn't really believe that his breath was all of a sudden smooth again. This response reinforced the trust in our methods immediately. While we were, of course, confident in our acupuncture abilities when treating someone in familiar territory, needling somebody with this kind of novel affliction was quite another story. This needle for the first patient, therefore, not only opened him up, but opened up us, as well. The efficacy of Chinese medicine is truly extraordinary, and acupuncture is one of its remarkable tools!

The Importance of Differential Diagnosis

After that, it went step by step from there. We brought in the herbs on days two or three. Our impression so far, as we once again discussed within our team this afternoon, is primarily this: No matter whether we are dealing with the coronavirus or something else, it is still human observational skills that are most important for all successful treatment, formatted in the system of differential diagnostics (bianzheng shizhi) mentioned above. In the context of this disease, I want to emphasize the relevance of the Shanghan 6-conformation approach to differential diagnosis. Our own relationship to the Discourse on (Epidemic) Disorders Caused by Cold became much deeper in this process, since much of its theories became verified by what we encountered in that hospital ward. We can now ask the question why the knowledge transmitted by this classic is so exceptional; why in the era following the Eastern Han dynasty, specifically during the time of the commentator Wang Shuhe (c.180-c.270) and the Tang dynasty afterwards, the Discourse was declared the gold standard for all medical traditions in China; why even the Fever School scholars of recent centuries still relied on these theories, like Ye Tianshi (1667-1747) and Wu Jutong (1758-1836); and why, in essence,

its author Zhang Zhongjing (150-219) was declared the patron saint of medicine? I know that right now I am sounding like an advertisement for Shanghan theory, but it really is the truth! We have seen quite a bit of this disease by now, starting with the online treatment program we began through the Tongyou Sanhe Foundation in Beijing. We were able to gather quite a bit of information from patients all over the country before we came here to see patients face-toface. In this process, we discovered that all of a sudden, difficult passages in the Discourse became crystal clear to us. Why is the concept of yin-yang emphasized to such a degree in the Yellow Emperor's Classic: "When observing facial color and palpating the pulse, first differentiate between yin and yang"; "Yin-yang is the Dao of Heaven and Earth"? Etc., etc. Once we get to the Discourse, it utilizes this yin-yang system to differentiate all diseases-no matter whether it is COVID-19, or SARS, or any other disease. None of these are outside the phenomenology of yin-yang, and therefore can be categorized and understood with this system.

The Discourse, of course, differentiates between six conformations-further subdividing yin into three categories, and yang into three categories. This system then became a formidable conceptual weapon for approaching any and all disease. Most diseases, after all, first enter into the surface of the body and progress deeper from there. Since the surface belongs to yang, we can say that most diseases progress from yang to yin-from the three yang to the three yin channel systems. It is stated in the chapter "Treatise on Heat Diseases" (relun) of the Yellow Emperor's Classic that external pathogens first invade the Taiyang (Greater Yang) system. If the disease gets resolved within this external Taiyang layer, then it won't be able to go any deeper. However, if the disease progression does not get stopped here it goes deeper. Where to? To the Yangming (Bright Yang) layer. If it doesn't resolve there it goes even deeper, into the Shaoyang (Lesser Yang) system. And if it doesn't get resolved within one of the three yang layers, then it will further progress through the three yin. Such is the nature of this system: Taiyang to Yangming, Yangming to Shaoyang, Shaoyang to Taiyin (Greater Yin), Taiyin to Shaoyin (Lesser Yin), Shaoyin to Jueyin (Terminal Yin). Normally, progression occurs as described by this model.

The Diagnostic Complexity of an Epidemic

My mentor Lu Chonghan's Cinnamon Method (Guizhi Fa) and Aconite Method (Sini Fa) specifically focus on treating the vital Taiyang and Shaoyin layers. The Taiyang, after all, governs all three yang systems, while the Shaoyin governs all three yin systems. If these two key components are taken care of, then the most important aspects of a treatment protocol are generally covered. This time, however, we discovered the following problem. In retrospect, I must admit that much of my previous understanding of the concepts laid out in the Discourse weren't quite deep enough to understand these more complex nuances. Why is there a concept called Complexity Syndrome (hebing) in the Discourse? Or situations that are labeled Synchronous Disease (bingbing) or Dual Affliction (lianggan)? Let's start with Complexity Syndrome: normally, a disease starts exclusively in the Taiyang layer, then goes on to the Yangming layer, then to the Shaoyang layer, and so forth. In the situation called Complexity Syndrome, however, we are dealing with a simultaneous affliction of both the Taiyang and the Yangming layers right from the get-go. This means that the Taiyang surface cold and Yangming internal heat are present simultaneously. It is even possible that all three yang systems become involved right away, encompassing not just the Taiyang and Yangming layers, but also the Shaoyang system-thus further complicating the syndrome picture, by manifesting not just external and internal symptoms, but also signs of pathology that are stuck in the half-inside half-outside layer. Furthermore, what is termed Synchronous Disease (bingbing) in the Discourse? This describes a situation when Taiyang disease is not quite resolved, and now starts to go deeper into the Yangming layer, creating a combined syndrome. However, different from the Complexity Syndrome, where two or three layers get invaded simultaneously right from the get-go, in the case of Synchronous Disease the disease progression happens in temporal sequence. What, furthermore, is meant by Dual Affliction (lianggan)? It means that both yin and yang systems are afflicted at the same time. This is the difference of the terms *hebing* and *lianggan*: when two or three yang layers are simultaneously afflicted, that is called *hebing*; when yin and yang layers are simultaneously afflicted, that is called *lianggan*. All of these concepts mentioned in the Discourse have manifested themselves in the course of this epidemic. Of course, when we got to Wuhan patients had been sick for a while already. But when we asked them and studied the disease histories prepared by our Western medicine colleagues, we saw that most of them did not start out with what we call an infection of the upper respiratory tract (shanggan) during the common cold/ flu. The lower respiratory tract appears to have been immediately involved; or there were mild upper respiratory symptoms at first, which then immediately progressed into an infection of the lower respiratory tract. Obviously, infections of the lower respiratory tract wouldn't be classified as a mere Taiyang syndrome in Chinese medicine anymore. At the very least, we are now talking about the Yangming layer, and within that, not so much the Yangming channel layer, but more specifically the deeper Yangming viscera layer. This is the reason why so many patients tend to exhibit digestive problems. We basically didn't see singular Taiyang layer afflictions, which later moved on to deeper layers inside. In many cases, the disease seems to have even skipped the Taiyang layer and right away invaded one of the deeper layers. Of course, the Taiyang system is always involved in one way or another.

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Herbal Approaches

To summarize our experience, this epidemic disease characteristically starts out as a Taiyang Yangming Complexity Syndrome (taiyang yangming hebing), or even a syndrome that afflicts all three yang layers at once. For Zhang Zhongjing to recognize and outline the progression of this type of epidemic during the 2nd century around the end of the Eastern Han dynasty is truly remarkable! His insights greatly help us in today's approaches to the disease. When we take a look at the government suggested Chinese medicine approaches to COVID-19, as published in versions 3, 4, 5, 6, and currently 7 of the "Recommended Treatment Approaches," we see Ma Xing Shi Gan Tang (Ephedra, Apricot Seed, Gypsum and Licorice Decoction) featured prominently, and recognize these same principles right away. As Chinese medicine physicians, after all, we need to start with our fundamental principles. If we don't have this kind of classical footing it is easy to get confused when perusing all of these complex treatment suggestions: Ma Xing Shi Gan Tang, Wuling San (Five Ingredient Powder with Poria), and Xiao Chaihu Tang (Minor Bupleurum Decoction) all combined into one-with treatment

suggestions like that it is easy for us to wonder what is going on. But once the basic principle is understood, our understanding of the design of these complex prescriptions becomes much easier, and suggested formulas such as Qingfei Paidu Tang (Clear Heat in the Lung and Expel Toxin Decoction) can be understood right away. What is the first component of this prescription, namely Ma Xing Shi Gan Tang, about? It is specifically designed to treat Taiyang Yangming Complexity Syndrome. Shigao (Gypsum), after all, is one of the representative substances that enter into the Yangming layer; and Mahuang (Ephedra), of course, enters into the Taiyang. Ma Xing Shi Gan Tang, therefore, is designed to address Taiyang Yangming Complexity Syndrome. How about Wuling San? It is a remedy that specifically addresses the deeper viscera layer (fuzheng) of Taiyang disease. But since Guizhi (Cinnamon twig) is an ingredient of this formula, the channel layer (jingzheng) is also being attended to. We can say, therefore, that this remedy addresses both the jing and fu layers of the Taiyang system, and therefore also treats a kind of Complexity Syndrome or Dual Affliction of the yang variety, if you will. What the role of Xiao Chaihu Tang is in this mix should be clear by now: it treats the Shaoyang aspect of the Complexity Syndrome. While this novel remedy does not have a traditional title and is somewhat hard to understand, the overall direction is correct when analyzed in this light. We ended up using an approach that was comparatively less complex, since we were assigned to the Hemorrhoid Department where we were free to use our own discretion in the prescription process. After writing a remedy, a volunteer would help us to get it filled and delivered to the respective patient the next day with the help of the Department's nurses.

So, we started issuing prescriptions based on the classical principle of Complexity Syndrome. My mentor Dr. Lu suggested to use Guizhi Fa (Cinnamon Method), a typical herb combination to approach the problem from the Taiyang layer. In addition, he admonished us to pay special attention to the regulation of Lung function, keeping the flow of Lung qi as unimpeded as possible. This piece of advice, naturally, involves the Yangming, since—depending on our perspective the Lung and Large Intestine can both be considered Yangming organ systems. In this way, both the Taiyang and Yangming layers are included in the medicinal approach. In concrete terms, this means that materials like Xingren (Apricot seed), Gualouren (Trichosantes seed), Tinglizi (Lepidium seed) etc. should be added to the base formula, thereby achieving a treatment that fulfills the requirements of Complexity Syndrome by addressing both Taiyang and Yangming systems at the same time. I also observed patients with obvious dryness symptoms—heat symptoms.

What did we end up using for these kinds of problems? Note that the classical remedy Mahuang Tang (Ephedra Decoction) is also a very effective treatment for situations where the Taiyang and Yangming systems are simultaneously afflicted. In the Discourse, after all, it is said: "For Taiyang Yangming Complexity Syndrome accompanied by symptoms of wheezing and chest fullness, Mahuang Tang should be the remedy of choice." Wheezing and chest fullness have been some of the main hallmarks of this epidemic, as well as shortness of breath. The patient may be just fine sitting on the bed, but once he or she gets moving, there will be immediate shortness of breath and the Western medicine staff will give oxygen. Most of the patients we have seen so far, actually, were put on oxygen at one time or another. As for the sensation of chest fullness, most patients had already become used to this symptom and did not in all cases report it to us. It was only after we started to administer acupuncture that they noticed an immediate difference: stuffy before, and wide open afterwards. So, Mahuang Tang should normally be considered for patients with obvious signs of wheezing and stuffiness in the chest. This formula, however, presents us with an important issue, namely the amount of the lead herb, Mahuang (Ephedra). As I have discussed with others in my team, Mahuang is indeed an important herb in the Chinese materia medica, but Dr. Lu generally advises against its usage, for reasons of being too intense for the weak constitutions of contemporary city dwellers.

The Intensity of Ephedra

As we know, Mahuang is a plant that grows in the desert, a place where basically nothing else will flourish. If you see a speck of green in the Chinese desert, therefore, it will for sure be Mahuang. This plant, therefore, has the capacity to sprout forth in a place where the dry qi of Metal reigns supreme—think about the life force, the upwardly mobile out-thrusting force that this plant must carry inside! This disease, therefore, gave me the opportunity to understand this herb much better. But indeed, the constitutional state of the average patient nowadays lets us understand why our mentor is generally against the prescription of Mahuang.

We had a male patient for whom we had already written a prescription. He actually had the medicine in hand but refused to take it, repeating over and over that when he was in quarantine he took some Chinese herbs and couldn't even close his eyes for the entire night. He didn't get a single moment of sleep. I knew that it must have been because there was Mahuang in his prescription, and the dosage was too high.

We realized first-hand how strong the penetrating action of Mahuang really is. COVID-19 is a directstrike disease, it completely bypasses the upper respiratory passages with essentially no response and strikes directly into the lower portion of the respiratory system, all the way to the edges of the lungs and along the pleural lining. Abnormalities on patients' CT scans were almost all along the pleural lining, the ground glass opacity was all at the periphery of the lungs, reflecting the affinity of the disease for these deeper locations.

So now you understand why I stated earlier that a negative result on the nucleic acid swab test is not necessarily something to get too excited about. Because the disease is not in the upper respiratory system where this test is limited to. The logic here is quite simple. COVID-19 strikes the lower respiratory system, explaining why many patients do not present with cough symptoms. We know that a cough requires a certain amount of space to produce. You can all experiment by feeling your chest as you cough. When the disease directly enters such a deep location, in the extremities of the bronchiole, it's difficult to produce the mechanism of cough and phlegm is not easy to expectorate. This explains why this disease is so slow to resolve and lingers the way it does, with that thick, sticky tongue coating that is so difficult to transform. Mahuang is able to penetrate to this level, so we would still use it at times. But you have to get the dosage right. Another team used Mahuang Tang, but the dosage of Mahuang was very low, no more than 6g per day.

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Reed Stem Decoction Worth a Thousand Pieces of Gold

Actually, this is still a Cinnamon Method. It approaches the problem from the Taiyang level, though Mahuang Tang already incorporates the Yangming as well. What about this Yangming heat? Lung heat? We didn't actually choose to use Shigao as in Ma Xing Shi Gan Tang. We can here borrow from Western medical diagnostics and CT-scan findings to explain our choice. CT-scans show localized excessive changes within the lungs in the form of ground glass opacity, consistent with pneumonia and often called the "great white Lung", those represent excessive changes. This phenomenon can be easily understood from the perspective of Chinese medicine: if the condition is solid, I need to use methods to empty (soften). If the condition is empty (soft), I need to make it solid. Shigao is a solid herb. What is an empty herb, in comparison? Weijing (Lugen) is empty-the part of the plant we use is actually hollow in the middle. The Essentials from the Golden Cabinet (Jingui yaolüe) part of the Discourse contains a formula called Qianjin Weijing Tang (Reed Stem Decoction Worth a Thousand Pieces of Gold). Originally, it was indicated for the treatment of pulmonary abscesses (feiyong), but we used it very effectively on this disease.

We ended up using a combination of the formulas Mahuang Tang and Qianjin Weijing Tang. This approach actually represents the Cinnamon Method within Dr. Lu's Fire Spirit School approach, and so we also added Cangzhu (red Atractylodes) and Shengjiang (fresh Ginger) to protect the Stomach. And what is this for? It still produced a remedy that addresses the etiology of Taiyang Yangming Complexity Syndrome. We even used this formula for preventative purposes for the hospital staff and for ourselves with good results. It all comes back to Taiyang-Yangming.

After entering the hospital ward, everything we did was based on direct observation. A very interesting finding that we all shared was the following: almost every pulse we palpated during those first three days was the same, all exhibiting an isolated slippery quality in the right *cun* position. At this stage it is difficult to find this kind of pulse anymore. The slippery quality in the Lung position is an indication of dampness, specifically of phlegm damp. It reveals deeply impacted phlegm, an important characteristic of this disease. Again, this is why there were so many patients who presented without a cough, some even for the duration of the disease.

How did these patients get better? From a Chinese medical perspective, this type of phlegm is called "dry phlegm". Dryness must be moistened before the phlegm can be transformed. Seeds are a kind of medicinal material that can nourish and moisten. Qianjin Weijing Tang contains the seeds Taoren (Persica) and Dongguaren (Benincasa). When using the Cinnamon Method, we may also add Xingren, Gualouren or Quan Gualou (Trichosanthes fruit) instead, the latter being also mostly composed of the seeds of the plant.

These kinds of seeds, including Xingren and also the Laifuzi (Radish seed) recommended by Dr. Lu, contain oils and therefore can moisten in order to transform phlegm. Once nourished, the phlegm gradually becomes thinner and begins to flow. This opens up adequate space and the patient generally begins to produce a cough. It is the same for acupuncture as it is for herbs. Some patients would start to produce a cough after we had administered acupuncture. Ironically, we would congratulate them as they began to produce phlegm. Take for example the patient in bed #13, who became nervous after we gave her acupuncture. As we were making rounds, she asked us "What's with all this phlegm and coughing now after you treated me? Is my condition getting worse?" I told her that, in fact, she was the best off among all the patients in our unit. Her chest x-rays, or CT-scan rather, showed the inflammation resolving quicker than in the other patients. After all, if this stuff cannot come out, how then can the lungs heal?

Using this type of combined Taiyang Yangming treatment strategy, we can preserve the smooth flow of the exterior of the skin and interstitial spaces, as the Lung governs the skin, correct? In addition, we needed to also employ methods that nourish dryness and transform phlegm in order to get rid of a portion of the congestion. What to do, however, if these two strategies alone are insufficient? Chinese medicine, fortunately, has so many therapeutic methods at its disposal. With which organ does the Lung share an internal-external relationship? The Large Intestine. In addition to clearing phlegm, what other function do these seeds have? They induce peristalsis and open the bowels. These kinds of seeds possess the skillful function of taking phlegm from deep in the Lungs, specifically from the narrow passages of the bronchioles, which cannot be expelled upward via coughing, and draw it down and out via the internal-external relationship of the Lung with the Large Intestine. The result is that these various excessive changes represented by the ground glass opacity in the lungs gradually resolve.

Many of the patients we encountered during our visits were both frustrated and anxious. While they had not further deteriorated to the critical stage, they had already received the standard Western medicine treatments but were not improving. They were stuck in a deadlock with little or no signs of change. The strategy of treating them with both acupuncture and herbs we employed upon our arrival started to produce consistent change on a daily basis. Patients greeted us with smiles and laughter every day when we returned for rounds, giving us the thumbs up with much hope in their eyes. Each day that we returned to the hospital, we would observe signs of positive change. This is generally how things progressed during the first phase.

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Recovery and Dual Affliction

There is also the matter of Dual Afflictions (*lianggan*) noted earlier on in this lecture. The precondition for Dual Affliction is deficiency within the yin systems. If the yang qi of the three yin systems is sufficient, the pathogen cannot enter into these layers, with no possibility of producing a Dual Affliction. Dual Afflictions are therefore the result of yang deficiency within the three yin systems. In addition to the congested, slippery right cun pulse findings, we also found the majority of chi pulses to be deficient, particularly weakness in the left chi pulse position. When we asked our mentor for guidance, he instructed that this particular pulse pattern is an indication for the addition of Fuzi (Aconite). As many of you know, Dr. Lu very much likes to use Fuzi, thus his nickname Lu Huoshen (Lu Fire Spirit). Our first prescriptions were centered on the etiology of Taiyang Yangming Complexity Syndrome. Our second round of prescriptions moved in the direction of treating Dual Affliction. At the yang level, we continued with the combined strategy of treatment outlined above, while adding Fuzi to address the yin level. This was one of the factors that produced daily change in patients, reflected also in their pulse

and tongue patterns. The thick coating in patients' tongue presentation was reduced daily. These signs confirmed for us we were applying the fundamental principles of Chinese medicine correctly, and that our medicine is able to resolve not only average problems, but epidemic diseases such as this one. We didn't use anything special, just the same old system of six-phase diagnostics and corresponding *Shanghan* strategies. The results we achieved were undeniable.

There were also patients at the Number 8 hospital they had taken in with more complex underlying conditions in what they were calling the recovery phase of COVID-19. So we moved over to the Internal Medicine Department #1 from the Hemorrhoids Department #3, where patients' symptoms were not as acute but their underlying conditions were more complicated. For example, we worked with a patient who had suffered a ventricular brain hemorrhage. At the time of our initial encounter, the patient was mostly unconscious. Her pattern of hemiplegia was also not yet clear as she had not yet regained full consciousness. We treated her with acupuncture followed by herbal medicine according to the Lu-family style. In the space of just those few days that we were there, the patient's clarity improved significantly and she was able to interact with us without much problem. Her husband confirmed that she was showing significant improvement. She was still unable to move her right arm, but she could use her left arm to raise it above her head. She was able to respond to our greetings and questions about her condition. The diagnostic methods we employed for a more common presentation like this were the same as those we used to address the more acute stages of epidemic disease.

We encountered another patient, a man over the age of 70 infected with the coronavirus, who had suffered a cerebral infarction and was now paralyzed on the right side. The first day, Dr. Lei Ming gave him acupuncture. At the outset of treatment his upper right extremity was almost completely paralyzed, and he was unable to slide his arm horizontally across the bed. I didn't expect that once the needles were inserted that he would be able to lift his arm. It was quite incredible, but that's what happened.

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Acupuncture

The use of acupuncture is also informed by six-phase diagnostics. Take, for example, the situation of Dual Affliction. The protocol we used most was to thread a needle from Taiyuan (LU9) to Yangxi (L15). The Yellow Emperor's Inner Needling Technique utilizes the six-phase model, and diagnoses according to the three yin and three yang phases, namely Taiyang, Yangming, Shaoyang; Taiyin, Shaoyin, Jueyin. The Hand Taiyin and Foot Taiyin channels share the same qi, and selecting Foot Taiyin channel points should thus have the same value as selecting Hand Taiyin channel points. There is no difference.

But with the unique conditions surrounding the COVID-19 outbreak, it is inconvenient to have patients remove their socks and other clothing. It is difficult to maneuver within the hospital setting in full crisis response mode. You have to be very careful. The tension in the ward was overwhelming when we first arrived. So we tried to adapt to the situation as much as possible, and conducted almost all of the needling here on this area, the wrist. In the Inner Needling system, we know that the wrist corresponds to the upper burner. The Lung resides in the upper burner, and so this area was enough to do what was needed. For the patients who had suffered cerebrovascular accidents, we needled the feet as well, in accordance with the Inner Needling principle of "when disease is on the right, treat the left; when disease is on the left, treat the right; and when disease is above, treat below." For all other patients we needled the wrist. Look at this strategy of threading Taiyuan (LU9) to Yangxi (LI5). Yangxi is a Yangming point, no? And Taiyuan is a Taiyin point. The Dual Affliction of the Yangming and Taiyin layers is also an important characteristic of this disease. The Dual Affliction characteristics of this disease is not only limited to a Taiyang Shaoyin pattern, but also includes Yangming-Taiyin and even Shaoyang-Jueyin Dual Afflictions. There have been many reports of the virus leading to nervous system disorders. This development would reflect a Shaoyang Jueyin Dual Affliction. Even for cases involving the Shaoyang-Jueyin levels, Chinese medicine offers therapeutic solutions.

In the domain of our acupuncture system, we tend to treat these various Dual Afflictions with thread needling techniques. For example, threading from Taiyin to Yangming, or in reverse from Yangxi (LI5) to Taiyuan (LU9) as these two points are very easy to thread. You can also thread from Neiguan (PC6) to Waiguan (SJ5) or Waiguan to Neiguan, another commonly used strategy. Shenmen (HT7) threaded to Yanggu (SI5) is another strategy, though used less often. More often, we separate this type of strategy into two steps, needling a Taiyang point like Houxi (SI3), for instance, followed by separate needling of Shenmen (HT7). These were the points that we used the most, chosen because of their functions within the outline of the six-phase system.

It is now coming up on one month that we have been at the front line in Wuhan. Although our efforts have been limited in scope, I am happy to share these insights gained through personal experience of treating COVID-19 with both acupuncture and herbs. I would like to remind our community of fellow Chinese medical practitioners what useful tools we possess. Chinese medicine is something truly special, especially the modality of acupuncture. We have been deeply impressed by its direct effects. Just a couple needles provided immediate relief for patients, particularly for those in a highly anxious state of mind. Patients always felt much more at ease as soon as those needles went in and their symptoms improved. Our use of herbal medicine, of course, also contributed, creating the conditions for these quick results.

Zhang Zhongjing Synthesized Two Classical Lineages

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Chengdu is quite an amazing place. My teacher lives there, and so I think it is the place where I have spent the most time living and studying. There is a very blessed place in Chengdu known as the Tianhui District, where a very important archeological find was made. The Tianhui Medical Archives contain the largest volume of unpublished medical texts unearthed since the founding of the People's Republic of China. I was able to learn from Mr. Liu Changhua, director of the research institute in charge of the Archives, that these texts belonged to Chun Yuyi (2nd century BCE) of the Medical Classics lineage of transmission. I would like to take this opportunity to say a few more words about why we insisted on using both acupuncture and herbs for our COVID-19 patients, given that I had not previously used acupuncture for the first several decades of my medical career. I wouldn't say that I was lazy, I just hadn't touched a needle for that long. In 2015, finally, the opportunity arose and I started using acupuncture after becoming a disciple of Yang Zhenhai. Now, I never leave home without carrying some needles. I always have some in my bag at all times. Today, my lecture is focused on Zhang Zhongjing, and what is it that was Zhang Zhongjing's greatest contribution? Just now, I mentioned Chun Yuyi and the Medical Classics lineage, which is also strongly associated with Bian Que (c. 4th century BCE). The Medical Classics lineage represents the transmission of the principles laid out in the Yellow Emperor's Classic of Medicine. What is the primary modality of this lineage? It does include within its scope a range of modalities, such as divination and shamanistic practices, the use of stone needles, herbal remedies, the nine finer needles, energetic daoyin therapy, but if we had to choose one of these as the primary modality of both the "Suwen" and "Lingshu" (Magical Pivot) portions of the Classic, it would be acupuncture. Acupuncture, therefore, is the main focus of the Medical Classics lineage.

The landscape of Han Dynasty medicine, or maybe I should use the term cultivation arts, included four major schools: the medical classics, classical formulas, arts of the bed chamber, and immortality practices. For the purposes of this conversation let's put the arts of the bed chamber and immortality practices aside for the moment and consider the two lineages of the medical classics and classical formulas. The Classical Formulas lineage follows the system of the Decoction Classic (Tangye jing), and its primary focus is the use of herbs. We know that the official court history of the Han dynasty does not include a life history of Zhang Zhongjing, despite the fact that he served as the governor of Changsha there is no mention of him in official records. We know of him only through the works of other physicians such as Huangfu Mi (215-282), author of The ABC of Acupunctue and Moxibustion (Zhenjiu jiayi jing), who mentions in his introduction that Zhang Zhongjing "was the author of a broad treatise on herbal medicine known as the Discourse on Disorders Caused by Cold and Miscellaneous Diseases (Shanghan zabing lun)." Zhang Zhongjing was an inheritor of the system laid out in the Decoction Classic, and there are scholars now, including Dr. Hu Xishu, who believe that this lineage of the Discourse and the Decoction Classic have nothing to do with

the Yellow Emperor's Classic. I strongly disagree with this opinion. My view, which I hold very strongly, is also supported by the scholar Liu Changhua. This, actually, is the very thing that makes Zhang Zhongjing so great, what qualifies him to be called the Great Saint of our medicine-not simply because he wrote the masterpiece known as the Discourse, but because he responded to the great epidemic of his time, one that claimed the lives of two thirds of the members of his extended clan, by "diligently studying the ancient ways and compiling [his] work from a broad survey of extant formulas." The end product were two lineages combined into one. At that time, the Medical Classics and Classical Formulas lineages were like cars on two different roads with a considerable distance between them, like well water and river water that do not mix. Zhang Zhongjing brought these two traditions together and synthesized them into one cohesive system. One of the hallmarks of this work is the synergistic use of acupuncture and herbs. It is just as Sun Simiao (581-682) states in his famous piece, "The Essence of the Great Physician" (Dayi jingcheng): "Take measure and use acupuncture and herbs without error!" Right? When we look at modern Chinese medical education, we see an increased respect for acupuncture these past few years compared with the past. But I see a fundamental problem in the approach of a stand-alone college teaching just acupuncture and massage. Graduates from an acupuncture and massage program will have difficulties in the future prescribing herbs, because they will be completely unfamiliar with this complex modality. On the other hand, someone like myself who graduated from an internal Chinese medicine program lacks instruction in acupuncture, and so I never learned how to use needles. I am sure this is not the vision of a great saint of medicine like Zhang Zhongjing.

During the Eastern Han dynasty, the Medical Classics lineage was the more prominent of these two traditions, while the Classical formulas lineage was in relative decline or even in danger of being lost completely. The greatness of Zhang Zhongjing was to take this lineage of Classical Formulas that was nearing exhaustion during his lifetime and revive it. It represents a course correction that rose above the orthodoxy of his time. This explains why the emphasis of the *Discourse* lies in the application of herbal formulas. But what about the framework that he employs? We all know, from looking at his classical formulas that include terms such as the White Tiger (Baihu), the Blue-Green Dragon (Qinglong), the Dark Warrior (Zhenwu) and of course the hidden Vermillion Bird (Zhuque) that the underlying structure of his work is clearly based on the five phase element system. Zhang Zhongjing is speaking in terms of the phase elements, not in terms of the channels. He used the framework of the Medical Classics and filled it with the content of the Classical Formulas, skillfully creating this synthesis of the two. In terms of clinical application, this combination is best represented in the combined use of acupuncture and herbal medicine, just as Sun Simiao pointed out, by "taking measure and using acupuncture and herbs without error!" This trip really moved us deeply in every way. As a Chinese medical practitioner, you have to walk both of these paths, acupuncture and herbal medicine, well. You cannot ignore either one.

While our work in the Hemorrhoid Department #3 may be finished, our connection with the Department is far from over. I have the deepest admiration for the medical staff of this team in Wuhan, who have been working from the very beginning when they had very little to protect themselves. These people are truly amazing, and their work has been first-rate. We have a continued commitment to support and protect them and their well-being. When they were exhausted and unable to lift their arms, our first response would be to use acupuncture on them. Of course, we also used herbs, but often just a single needle was able to make a tremendous difference. They would be able to lift their arms again.

Finally, I should say that there are our mother organizations, the Tongyou Sanhe Academy as well as the Tongyou Sanhe Foundation in Beijing. I almost forgot this important goal of mine today, and am now going to take a minute to advertise our cause. One of the main projects at the Tongyou Sanhe Academy is the continuation of the lineage of Chinese medicine. The application period for our fourth class of entering students is almost over. It will conclude at the end of March, so you all still have some time to apply. We emphasize the practical skills that bring together the two ancient lineages of the Medical Classics and the Classical Formulas, thereby preserving the original intentions of Zhang Zhongjing. In order to truly restore the vision of the old master in our modern time, we need to learn both herbal medicine and acupuncture!

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Questions and Answers

The first question is: "COVID-19 is a cold damp epidemic, why did you say there is also dry phlegm?"

This issue, I feel, is not so difficult to understand. Dryness and dampness are a complimentary pair, after all. This is why we use the term Dual Affliction, why we touched on both the Taiyin and Yangming. Once the entire Taiyin network becomes extremely damp, the Yangming becomes dry. This is what naturally happens at this stage, and this is what we mean by Dual Affliction. Once you have a bit of understanding of the principles laid out in the *Discourse*, this is not a problem.

The second question is: "What are your views relating to recovery from COVID-19?"

I believe that recovery is going to be a long-term project. That is why yesterday the three of us wrote published an essay entitled "The End is Just the Beginning". You all can have a look. It specifically addresses this question regarding recovery stage. It addresses the point I made earlier, which is not to place too much importance on the COVID-19 swab test, because this disease is not located in the upper respiratory system, and therefore this test is not always conclusive. In general, it is an arduous process for a patient to produce that cough and begin to push things out via the upper respiratory system. Recovery from this type of condition is going to be gradual. It is also why I emphasized the importance of early stage treatment of the Taiyang system. This disease needs an exit pathway, where it can be eliminated through the Taiyang. That is why from beginning to end, we have emphasized the use of the Cinnamon Method or a modified Mahuang Tang strategy, right? As for the Lung, we have to care for the Yangming system as well throughout the entire process, but during the recovery period it is most important to rebuild the three yin systems. For that purpose, Dr. Lu has taught us to use the Aconite Method, which of course includes the use of Fuzi, but in practice we have actually been using this concurrent treatment strategy all along. The fact is, though, that many patients have not yet fully recovered from the initial inflammation, which means the emphasis still needs to be on the Complexity Syndrome of the three yang phases. We are, of course, still synthesizing our experiences, but generally I can say that at this stage we have been treating the Complexity Syndromes

simultaneously with the Dual Afflictions. As patients move into the recovery period, the Complexity Syndrome aspect will gradually resolve. We can confirm that this is happening by observing changes in both pulse and tongue presentations, seeing that thick, sticky coating progressively clearing, becoming thinner. At this point, we need to shift our focus from the Taiyang level, lightening treatment there, and emphasize the three yin phases using the methodology of the Aconite approach to support the vital force, supplemented by still addressing the Yangming layer, which in the end should resolve the problems of the Lung.

Another question: "Will this virulent outbreak of COVID-19 help drive the further development of Chinese medicine?"

I believe it will, provided we are able to maintain the right perspective. I would like this opportunity to make an important point here. I recently have seen many blog posts making the rounds that promote Chinese medicine over Western medicine, making all kinds of comparisons. I think it is impossible to make these kinds of comparisons. There is no need to boast how useful your methods or how high your success rates are, at least not during such a time of crisis. Some of the articles posted online really go too far in that regard. The collegial spirit of Chinese medicine should caution us to avoid this kind of approach. I don't believe that this type of message is supportive to the cause of Chinese medicine at all, and even think it may be digging us a hole. I have always felt that the development of Western medicine in China has been a great blessing and even wrote an article to this effect. Why do I emphasize this point? Because in the sociohistorical context of China, Western medicine is able to progress forward by standing on the shoulders of Chinese medicine; it is able to look far into the future by building on the foundation of Chinese medicine. The People's Times published an interview with me today, otherwise this tide may have become even stronger. When we examine modern medicine on a macro-level, the average person clearly thinks of it as a scientific discipline. Once we add the perspective of Chinese medicine into the mix, however, our view on many questions will no longer be the same. It can completely reshape our thought process and perspective. This combination opens up the possibility of a global medicine system. Our Western medical colleagues in China have the same responsibilities and mission as

we Chinese medicine practitioners. In fact, they have provided Chinese medicine with thick shoulder pads. Personally, as a Chinese medical practitioner I hope to make friends with Western medicine practitioners, especially those of a higher caliber, so we can all find a way to productively work together. As long as there is adherence to the truth, that there is acknowledgment of clinical facts, there will be many ways in which we can cooperate. I sincerely believe that the same is true of our Western medical colleagues and their support of Chinese medicine. In the wake of this epidemic, I think we should avoid wasting time on these useless comparisons that favor one over the other. Instead, I think it is a rare opportunity to further integrate these two medicines, to learn from one another, and to grow together. We should avoid at all costs accusations that will cause the Western medical field to retaliate. If our Western medicine colleagues would not have rushed into action during the early period of this epidemic, we would never have been able to do the work we accomplished in their Hospital Department #3. Those Western medicine physicians created the conditions for us to work, to make rounds to see patients. It is not our place to criticize. I encourage everyone to look at this question with a calm and objective attitude, and to avoid creating conflict by hurling criticism.

Question: "For students enrolled in Chinese medical programs, what is the best way to study the Classics outside of required TCM coursework at the university?"

I have always said that the study of the classics is a lifelong endeavor. The very quality that makes them classics is that they are fundamentally different from a magazine article that you can be done with in a single reading. The study of the classics is not just about obtaining information. The classics are not about the transmission of concrete data. They are a tool for the development of the intellect, for the evolution of wisdom. During our stay in Wuhan our mornings are occupied with hospital rounds, but some days our afternoons are free. I didn't have an opportunity to bring many books with me, so I found myself reading through the "Treatise on Needling Methods" in the Yellow Emperor's Classic over and over. We were also strictly prohibited from bringing even a single sheet of paper out of the hospital ward, and so the three of us would also use these afternoons to discuss and review what we had seen in the morning. It was not your typical situation where we write out physician

instructions along with a prescription. You can't even take a pen out of a hospital ward under quarantine conditions like that. In the end, someone donated cell phones for us to use. In addition to the full support of Mr. Fang Hua that made our trip possible in the first place, there were many other volunteers who came forward to assist us. Their help and support have been overwhelming. Some gave money, others medicine. Shipments of medicine were arriving daily, all donated by volunteers. We are truly grateful for these efforts. We used the donated cell phones to take photos and make recordings that we then sent out directly from the hospital ward. Our process was to go back later and listen to these recordings in order to better write our prescriptions. Every once in a while, we had some free time that I would use to read the classics. The benefits I obtained from those readings were exceptional. Many questions I had been unable to work out for decades suddenly became clear. My understanding of the "Treatise on Needling Methods" has deepened significantly, along with many other aspects of Chinese culture, including even some of the passages in Laozi's Daodejing. It all came together for me. There is really no way to predict when you will have those enlightening moments in your study of the classics. You have to simply be close with them, and those moments will come.

Question: "Professor, what is your view on the disparate use of herbal medicines employed by a variety of different Chinese medicine teams in the treatment of this epidemic?"

Indeed, it is true that many different approaches and strategies have been used. The central government even issued a list of standardized official strategies. Take, for example, the strategies that came out of Shanghai. In Shanghai, their team insisted that Renshen (Ginseng) and Dahuang (Rhubarb root) need to be used throughout the treatment from beginning to end. What does this mean in the light of what we have already discussed? Once again, one must understand the underlying principles at work in order for this recommendation to make sense. What is Renshen, and what is Dahuang? Renshen is a key component of Lizhong Tang (Regulate the Center Decoction) and Dahuang is the lead component of Chengqi Tang (Order the Qi Decoction). Together, are they not addressing the Dual Affliction of the Taivin and Yangming systems? Is this kind of prescription not guided by the same principle as thread needling

Taiyuan (LU9) to Yangxi (LI5) or Yangxi (LI5) to Taiyuan (LU9)? I truly hope that each of you will take the time to ponder the underlying principles that these strategies are based on. If you are clear on this level, you won't need to be so concerned about the fact that there are so many different types of prescription recommendations floating around. You won't get stuck wondering why we over here are not doing it like this or like that, or how ineffective it will be elsewhere because they are not using Qianjin Weijing Tang or the Cinnamon Method. Your perspective will be much broader, because you have a framework that can contain all of these disparate herbs and prescriptions. Once your principles are clear, you won't endorse only one approach and criticize everyone else who approaches the disease in a seemingly different manner. Bolstered by sufficient theoretical insight, you will on the contrary develop admiration for different effective strategies that you can learn from. Every individual's experience is different, after all. In my case, for example, because I have taken Dr. Lu as my main mentor, Cinnamon Methods are going to be my first response. But as we saw in the process of this epidemic, we can and should always be learning from new experiences. A practitioner who studied under the tutelage of a different mentor is naturally going to have a different first response. If it were a student of Professor Huang Huang, for example, she would most likely first think of using Guizhi Tang (Cinnamon Decoction) plus modifications. It ultimately boils down to the appropriate correspondence between symptom presentation and formula prescription. Another example, located right here in this building, is the Charitable Chinese Medicine Volunteer Group. Their prescription strategy is also different from ours. They have been using formulas like Ling Gan Wuwei Jiang Xin Tang (Poria, Licorice, Schisandra, Ginger and Asarum Decoction). If you analyze their treatment methods closely, however, you will find that they have not separated from the basic framework of the six phases and the mechanisms of Complexity Syndrome and Dual Affliction.

Question: "What is the difference between the classifications of febrile disease (wenbing 溫病) and pestilence (wenyi 瘟疫) in the classics?"

I don't really need to go into this question because both the *Yellow Emperor's Classic* and the *Discourse* discuss these types of epidemic diseases in great clarity. Suffice it to say that the infectious nature of these diseases affects a wide range of people from young to old in very much the same way. I saw in the news that as of today it is 164 countries that have been affected in some way by COVID-19. Much of Europe is in disarray. The symptoms of infection, however, are always the same; it always invades the lungs.

Question: "What are your impressions of how a patient's emotional state influences the onset and development of COVID-19?"

There is a definite influence! The Classic says: "The Heart is the sovereign of the organ systems, and the light of spirit emerges from it." Furthermore: "When the sovereign is clear and bright, all below is at peace; when the sovereign is not clear and bright, all of the other organs are at peril." Many of our patients were in a highly anxious state. When we moved over to the hospital's Internal Medicine Department #1, the patient in bed #13, an elderly woman in her seventies, would be crying when she talked with us. Her crying then gave way to laments that she had been transferred from such and such a place after more than a month without significant improvement, that the end was near now and that she was done for. We repeatedly tried to console her, telling her to be patient and not to cry, that change would come soon, and to stop saying that she won't get better. We were confident in our counsel, because at this point we had already seen obvious treatment results in Hemorrhoid Department #3. We are not talking about therapeutic success in a few isolated cases. I have always said that Chinese medicine is very much capable of living up to the standards of replicable science. Many people use the standard of replicability as a measurement for the scientific nature of Chinese medicine or lack thereof, saying that the results of Chinese medicine cannot be replicated: "What is effective for John Smith is totally ineffective when used on Jane Doe." I say, in contrast, that Chinese medicine is the most replicable of all sciences! Just about every one of the patients we treated showed improvement, every single one! There was one doctor who contracted COVID-19 who manifested symptoms of low back pain after treatment. That was the only case we encountered where results were less than desirable, but apart from that every other patient responded positively.

Lei Ming: He actually is better now.

Liu Lihong: Really?

Lei Ming: Yes, he manifested a delayed response to our treatment.

Yes, the delayed response. While we are not fixated on signs of immediate improvement, in many cases patients do feel better almost immediately after the needles are inserted. There are also a few situations where the patient experiences a delayed response to treatment. We definitely encountered a few of those. I would first needle them, after which they would respond by saying "it still hurts." I would then ask our "Thunder Spirit" Dr. Lei Ming to perform acupuncture on them, but the result remained the same. Three days later, however, they reported that their symptoms were gone. We were fairly confident, therefore, when we talked to this elderly patient in bed #13. I told her: "Auntie, please don't get so worked up. We want you to get better, and this lamenting doesn't help!" As soon as we got the needles in, her body started to respond. At the time, she was quite ignorant about the efficacy of Chinese medicine, because she had no idea that things could change so rapidly. Today we were back in the quarantine zone, but yesterday we had decided to take a day off and rest. When requesting a day outside from Headquarters, they offered to take us to the East Lake to see the cherry blossoms and get some fresh air. So yesterday, our patient was apparently waiting impatiently for the moon and the stars to rise. When we arrived for rounds this morning Auntie greeted us with a big smile saying, "It's about time you all got here...!" The change was pretty significant: no more tears... So yes, emotions have a profound influence on the course of this disease.

Any more questions?

Question: "What do you think about the news that someone used the traditional science of atmospheric energetics (wuyun liuqi) to predict this epidemic ahead of time?"

This disease is most definitely related to environmental forces (*yunqi*). The system of *wuyun liuqi* includes the aspects of the so-called host qi (*zhuqi*) and guest qi (*keqi*). When the host engenders the guest, according to the cycle of the five phase elements, it is generally considered a good scenario. For example, winter is generally supposed to be cold. However, during the second half of last year part of the dominant energetic influences are categorized as Shaoyang Ministerial Fire lodging at the Source (*zai quan*), meaning that the guest qi of this period was Shaoyang Ministerial Fire. If the elemental nature of the host gi engenders the guest qi, it will cause the cold quality, that is the righteous qi of winter, to prevail. If the guest engenders the host, however, then this will be contrary to the norm and winter will be warm. This then becomes the unseasonal energy we mentioned earlier on. Along the same lines, the principle energy of spring should be warm. But the guest qi that dominates the first period of this year is Taiyang Cold Water. This is one of the reasons why this disease started in winter and kept moving into spring. March 20 marks the conclusion of this first period of Taiyang Cold Water as the guest qi, which will then be followed by the influence of Jueyin Wind Wood. Jueyin Wind Wood is an energy that is warm in nature. This is how the science of environmental energetics can be used for predictive purposes, and in my opinion there is definite value and truth to this system. However, I hope that everyone will read the essay by the three of us entitled "The End is Just the Beginning". I don't think it is time for us to relax just yet-we need to remain on alert. As Chinese medical practitioners especially, we need to always look into the future for long-range planning.

We are coming up on nine o'clock. Considering these conditions, with our team stuck in a small room, all seated apart and wearing masks, it may be about time that we get some fresh air. You'll have to forgive me for the places in my presentation that didn't come out exactly right. We had three online platforms broadcasting simultaneously, and we encountered a few problems in the middle. I hope that after we conclude Dr. Zhang will be able to make the necessary adjustments and edit in the parts where the live broadcast got cut off.

Plea for a General Competency of Chinese Medicine

I would like to kindly thank my *alma mater*, Chengdu University of Traditional Chinese Medicine and Pharmacology, for the invitation to share our experiences in the form of this online session, that is all three of us: myself, along with Drs. Lei Ming and Zhang Jiangbin. I firmly believe that through educational events like this the field of Chinese medicine is going to continuously achieve a greater degree of acceptance

within modern culture. I have always felt that Chinese medicine is a worthwhile subject that everyone should learn about. In fact, the title of my interview in today's edition of the People's Times is "Every One of Us Should Study Chinese Medicine". Or to use Sun Simiao's words, "If every household had a student of Chinese medicine, the people would be able to care for themselves." I have appointed Chinese medicine a new role, namely that of "general competency" (tongye 通 業) that should be everyone's business. The knowledge of Chinese medicine is not a "specialty" comprised of only "specialists". Elevation to the status of general competency would require all people to learn some of it, not just Western medical practitioners. Elemental Chinese medicine training can realistically lead to a level of basic competence in the general population, something that can be used as a lifelong tool for cultivating and preserving everyone's health. If we take the government's idea that "the responsibility of good health starts with yourself" we should also think about the next step, namely what specific guidance to provide in order to achieve this goal. I firmly believe that Chinese medicine can play a primary role in this process. In comparison to the highly technical nature of Western medicine that is impossible to master by non-specialists, Chinese medicine is a practical science that can be made quite accessible for the general population.

If every person was to study Chinese medicine, if literally hundreds of millions of people understood the basics of this medicine and were able to use it to address at least some of their most common health problems, those with special skills and talents and the desire to go deeper will naturally begin to appear. These individuals can then go on to become fully trained physicians. In ancient times, this is how Chinese medicine doctors were produced. They weren't made by sending someone to get a BS in medicine, or even a Masters, or a PhD, or by completing a post-doc. I believe that Chinese medicine represents a very sophisticated body of knowledge that is nevertheless easy to learn. This is the case, at least, for the modality of acupuncture. If we open to the very first chapter of the "Magical Pivot" section of the Classic, entitled "The Nine Needles and Twelve Sources", we find an exchange between the Yellow Emperor and Qi Bo, with the Yellow Emperor asking how the transmission of acupuncture can be prevented from dying out. Qi Bo responds by saying that it should be "easy to learn and difficult to forget." The first characteristic of acupuncture, therefore,

is that it is easy to learn! The second characteristic should be an advanced level of difficulty within this easy-to-learn system, reserved for individuals who are interested in undertaking this as a lifelong path of study. It would be extremely appropriate for our current national agenda for the promotion of public health. What else are you going to rely on? The simple fact is that you have to instill a certain degree of medical expertise in every citizen to really be able to keep everyone healthy. We are not going to get there by establishing more and more medical universities or hospitals run by experts. Those kinds of policies are never going to raise the general level of public health. It is only by educating each individual in the basics of our medicine and having them take responsibility for their own health that the goal of improving public health can be realized, and that the ideal of healthy integrated small communities can become a reality.

With these remarks, I would like to conclude today's presentation. Thank you all very much!

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