

## Preliminary study on coexistence with the Covid-19 based on the Theory of Medicine and Food Homology

Leong May Ho<sup>1\*</sup>, Yong Yii Pin<sup>1</sup>, Heng Aik Teng<sup>1</sup>, Wong Pui Yee<sup>2</sup>, Chai Jia Yee<sup>2</sup>

<sup>1</sup>INTI International University, Persiaran Perdana BBN Putra Nilai,  
71800 Nilai, Negeri Sembilan, Malaysia

<sup>2</sup>Shu Guang TCM Healthcare Center, 26-1, Jalan Sri Permaisuri 9, Bandar Sri Permaisuri,  
56000 Kuala Lumpur, Malaysia

\***Email:** mayho.leong@newinti.edu.my, leongmayho@hotmail.com

### Abstract

Various plans for the treatment of COVID-19 were implemented by different countries. This research is a preliminary study to understand COVID-19 in Malaysia from the perspective of Chinese medicine and provide a coexistence plan. The methodology is to categorize the symptoms of COVID-19 in Malaysia under syndrome element and referred to the climatic environment to prescribe a tea that will draw up a life pattern to coexists with COVID-19. Considering that the symptoms of COVID-19 in Malaysia are fatigue, inability to swallow, and oliguria, early clinical symptoms are not obvious, but may lead to sudden death. The results showed that COVID-19 occurred in the hot and dry year of *Gengzi* (2020), and the increase in cases was evident in the fire and summer periods of the cold and wet *Xinchou* year (2021). Considering that the internal Fire is the most hurtful and the 'Cold and Dampness' will prevent the internal 'Fire' to be released to the outside. Based on this, it is inferred that COVID-19 in Malaysia is an internal Fire, mixed with external Cold, and has been an epidemic of Cold and Fire. Based on the theory of medicine and food homology, a dose of tea is formulated to separate the internal and external parts, dispel the body surface, clear the internal fire, and smooth the mechanism to achieve coordination of the inside and outside. Through this compatible tea, it can be used as a food or as a medicine. In the two-and-a-half-day treatment plan, a total of 11 confirmed or suspected COVID-19 cases were collected from July to August, all cases partial symptom elimination, no severe cases occurred, and the complete recovery rate was 45%.

### Keywords

COVID-19 coexistent life model, Syndrome element, Climate environment, Medicine and food homology

### Introduction

Since December 2019, human beings are facing a global pandemic outbreak which known as COVID-19. Countries have actively made corresponding policies against pandemic, besides the

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implementation of herd immunity with vaccines, the coexistence with COVID-19 in human life were discussed. Therefore, dietary prevention and treatment is being promoted. Diet is not only a way for humans to take in nutrition, but also a way of health care and prevention of diseases. The homology of medicine and food is the crystallization of wisdom summarized by Chinese medicine in food and drug discovery. The idea of homology of medicine and food includes tea, food and medicated diet (Shan et al., 2015). In Western countries, some people have proposed that kitchens replace pharmacies and foods replace medicines. Modern research on food regulating human functions has shown that secondary products of plants may be the material basis for the production of therapeutic functions. Drinking tea is a living habit of most people. The *Shen Nong's Materia Medica* records that "The day is seventy poisons; the tea will be solved".

In Chinese Medicine theory, food and medicine are believed to have the characteristics of *yin yang* and Five Elements (Niu, 1996), that is, Four *qi* and Five Flavors, Ups and Downs. Therefore, food is as biased as medicine. Yang Shangshan of the Tang Dynasty said in *Huangdi Neijing Taisu*: "Food on an empty stomach is food, and will be medicine for patients" (Hu et al., 2021). In *Zhou Li Tian Guan*, medicine is divided into food medicine, disease medicine, ulcer medicine, and veterinarian, of which food medicine is the first (Lin, 1985). In addition to medication, Zhang Zhongjing of the Eastern Han Dynasty also adopted a large number of diet and recuperation methods to cooperate with the treatment. Sun Simiao in the Tang Dynasty especially praised food therapy and proposed "food therapy" (Sun, 1997). The official revision of the *Taiping Shenghui Prescription* in the Song Dynasty records 160 plans for medicated diet (Hu, 1988). Later, during the Ming and Qing Dynasties, a large number of food-like herbals were produced. Therefore, by understanding of Malaysia's climate and the COVID-19 syndrome element together with reference of the medicine and food homology, a life pattern that coexists with COVID-19 can be drawn up. This research is a preliminary study to understand about COVID-19 in Malaysia from perspective of Chinese medicine then provide a coexistence plan.

## Methodology

First, the clinical symptoms of COVID-19 in Malaysia listed by KKM were categorized according to syndrome element in Chinese Medicine theory. Secondly, climacteric environment of Malaysia was analyzed for supporting the theory of syndrome element. Thirdly, teas were prescribed based on the analysis above and given to few COVID-19 patients to observe the effects. Finally, the case collected was analyzed and discussed.

## Results and Discussion

The clinical symptoms issued by KKM Malaysia (Kementerian Kesihatan Malaysia, 2021) include long-term fever, severe fatigue, dyspnea, chest pain, blue lips or fingers, inability to eat or drink by mouth, worsening of cough, vomiting or diarrhea, and decreased urination. Also some symptoms gathered from TCM's perspective like loss of appetite, thin and thick sputum together, rust-colored sputum, urine brown or cyan, pale tongue, thin greasy coating, prickly tongue with whitish sand coating or yellow coating or thick greasy coating. It had been categorized under TCM syndrome element as shown in Table 1.

Table 1. Categorization of Malaysia COVID-19 symptoms under TCM syndrome element

Heat syndrome element	Cold syndrome element	Either heat or cold syndrome element	<i>Fuqi</i> syndrome element
Severe fatigue	Thin sputum	Long-term fever	Dyspnea
Reduced urination	Thin greasy coating		Blue lips
Loss of appetite	Thick greasy coating		Inability to eat or drink by mouth
Thick sputum			Pale tongue
Rust-colored sputum			Cyanotic tongue
Brownish urine			
Prickly tongue			
Whitish sand coating			
Yellow coating			

In China, the symptoms of patients with COVID-19 infection were mainly fever, dry cough, less sputum, unfavorable throat, obvious fatigue, anorexia, nausea, loose stools, dry mouth, bitter mouth, unwilling to drink water, dark or sharp tongue slightly red, the tongue coating of most patients is thick and greasy (He et al., 2020). In view of the characteristics of the symptoms of COVID-19, academician Tong Xiaolin proposed that it belonged to the scope of "Cold and Damp disease", with both heat and dryness and other changes (Tong, Li, Zhao, 2020). Observations on the clinical efficacy of Chinese medicine in the treatment of COVID-19 patients (SATCM, 2020) conducted in four provinces by the China Administration of Traditional Chinese Medicine and the National Health Commission on 27 January 2020. Traditional Chinese medicine is effective, and the "New Coronavirus Pneumonia Diagnosis and Treatment Plan (Trial Fifth Edition)" (National Health Commission Research, 2020) was subsequently issued. It also pointed out that the characteristics of syndrome elements are "Dampness, Heat, Poison and Blood Stasis.". Due to differences in regions, climates, races, and virus mutations, some physicians will put forward individual opinions. However, "Dampness, Heat and Toxicity" run through every diagnosis and treatment plan (Wang et al., 2020).

Meanwhile, comparing with WHO (World Health Organization, 2021), and CDC (Centers for Disease Control and Prevention, 2021), the analysis of syndrome element in Table 1 showed that Heat syndrome element and *Fuqi* syndrome element were seen the most and inability to swallow and oliguria are clinically specific symptoms in Malaysia. Most people with severe or underlying diseases have sudden deaths but mild illnesses usually recover within two weeks. Comparative analysis shows that COVID-19 in Malaysia has a rapid onset and rapid change. It is prone to inflammation of multiple internal organs, hypoxia, and sudden death. The death rate in Malaysia also increased vigorously from 1<sup>st</sup> January 2020 to 25<sup>th</sup> July 2021 (JHU CSSE COVID-19 Data). From the perspective of traditional Chinese medicine, due to the Heat in the body, and the Heat is everywhere and produces Blood Stasis. So it leads to multiple internal organs inflammation and loss of function, and the initial symptoms are not obvious because of Cold and Dampness obstructing the body surface.

According to the theory of *qi yun* in Chinese medicine, 2020 is the year of *gengzi* Dry Fire. At that time, there were many fires in many countries. In this year the cases of COVID-19 were more common in cold-climate countries. 2021 is a *xinchou* Cold and Dampness year, and floods have also occurred in many countries this year. The number of cases in Malaysia were rising especially during the April and May which considered as Fire period, also significant increased in cases during Jun and July which considered as Summer Heat period of the year. In summary, considering various characteristics such as serious illness and sudden death, the disease that occurred in Malaysia this time is considered to be external Cold Dampness and internal Fire. In summary, COVID-19 is mainly caused by external Cold Dampness and internal Fire. The Six Evils, Cold and Fire, are easily mixed with other pathogens, so COVID-19 is prone to mutate and can occur all year round, presenting a global outbreak of a rotating epidemic, and eventually it will develop into a local epidemic (endemic).

Based on the climate and syndrome element's characteristics, it can be inferred that the pathogenesis of COVID-19 is external Cold and Dampness with internal Fire, usually TCM practitioner will call it *fuhuo*. Based on this, a *fuhuo* tea can be formulated to eliminate Cold, Dampness and Heat and reconcile both the outside and the inside. In order to achieve this effect without harming the body, the tea should be 1/10 of the normal dosage, and it is taken with warm water. Because it does not undergo decoction, the active ingredients in the plants are not destroyed, and can improve the effect of the secondary products of the plants in regulating human body functions. Herbs were grinded into powder form based on the following: *Chai Hu 0.3g, Huang Qin 0.1g, Ge Gen 0.3g, Qiang Huo 0.1g, Yu Jin 0.3g, Da Huang 0.1g, Hou Po 0.3g, Ban Xia 0.1g, Huo Xiang 0.3g, Huang Lian 0.1g, Sheng Di 0.3g, Sheng Gan Cao 0.1g, Xuan Shen 0.3g, Zhi Zi 0.1g, Sang Ye 0.3g, Xing Ren 0.1g, Jie Geng 0.3g, Zhi Gan Cao 0.1g, Shi Gao 0.3g, Cang Zhu 0.1g, Bo He 0.3g, Su Ye 0.1g, She Gan 0.3g, Ma Huang 0.1g, Dan Shen 0.3g, Jin Yin Hua 0.1g, Fu Ling 0.3g, He Ye 0.1g, Xi Yang Shen 0.3g and Wu Wei Zi 0.1g*. Total of 42g will be given after consultation to each patients to consume three times a day with 6 grams each time continuously for 2 days and a half as one course.

Table 1. Observation on COVID-19 diagnosed case or suspected case treated with *Fuhuo* tea.

Patient	Diagnosis in COVID-19	Contact history / medical staff	Course of disease	Refreshing after taking	Partially reduce symptom	Recover completely	Worsen
C1	+	-	Day 9	+	+	+	-
C2	-	+	Day 7	+	+	+	-
C3	+	-	Day 21	+	+	-	-
C4	+	-	Day 11	+	+	-	-
C5	+	+	Day 2	+	+	-	-
C6	+	+	Day 2	+	+	-	-
C7	+	-	Day 9	+	+	+	-
C8	+	-	CTV30	+	+	+	-
C9	-	+	Day 2	+	+	-	-
C10	+	-	Day 14	+	+	+	-
C11	+	-	Day 1	+	+	-	-

Case record collection period: 30 July 2021 - 22 August 2021 (24 days), total 11 cases, 9 were confirmed COVID-19 patients, and 2 were suspected COVID-19 patients who had close contact with the patients. Through the observation of a course of treatment of 7 times in 2 and a half days, all 11 cases were effective and achieved the goal of partial symptom elimination. At the same time, the patient did not show any uncomfortable reaction after taking the tea. Among the 11 cases collected, 9 had a disease course of more than 7 days, and 4 had a disease course of less than 7 days. Most patients with a disease course of more than 7 days were cured, reaching 71%. However, there were no cured cases with a disease course of less than 7 days. The recovery rate of overall was 45%, and at the same time, none of the 11 cases became severe. In C11 case, it was a patient in the early stage of COVID-19. After taking the medicine, on the third day of the course of illness, his cough resolved but fever occurred. From the perspective of traditional Chinese medicine, this is because the pneumonia symptoms eliminated and have a good immune response, which is a manifestation of changing from heavy to light.

According to the application case of the above theory: On 26 July 2021, the young male patient, Leong, was admitted to the hospital due to fever and vomiting for a week and was diagnosed as a COVID-19 patient. Therefore, the family of four, including a younger brother, mother and father, was arranged to be quarantined at home. Except for his brother's asymptomatic, his mother's body aches and fatigue, his father's eyes are red and he is known to have bronchitis, on 28 July 2021 the next day, the mother was found to be in poor spirits, with a hoarse voice, and his father's lips were dark. These symptoms had lasted for more than 1 week. The whole family started to take the *fuhuo* tea that day and after taking the tea for one day, they were called for consultation on 29 July 2021. When the mother woke up in the morning, the discomfort was gone, the spirit was refreshed, the father's complexion was good, the lip color was not dark, the brother and younger brother had no uncomfortable reaction. It is recommended to continue taking the tea until the course of treatment is completed and when the course of treatment is over, the symptoms were completely eliminated without discomfort. Another example in normal life like Hakka *Lei Cha* is a diet therapy that has been integrated into daily life. The characteristic of Hakka *Lei Cha* is that a small amount of ground herbs is added to the normal daily diet. The herbs are only prepared with warm water. After consumption, the human body will have a refreshing effect and a feeling of fullness.

### Conclusion

Coexistence with COVID-19 is a trend and *fuhuo tea* can be formulated for alleviating the symptoms of COVID-19 based on the theory of medicine and food homology. According to observations, although the traditional Chinese medicine *fuhuo* tea does not significantly shorten the course of the disease, it has obvious advantages in eliminating the uncomfortable symptoms of COVID-19. This *fuhuo* tea not only eliminates the symptoms of patients, but also has the effect of preventing severe illness. It can be recommended as a treatment for COVID-19. It is a supplement to relieve symptoms and prevent severe illness. Apart from this, *fuhuo tea* starts with diet therapy, so this is why it does not produce adverse reactions, and then it can be widely used, and can be used for both diagnosed and non-diagnosed. The purpose is to feel relaxed and have no discomfort after taking it. The provided case also verified that this *fuhuo tea* can effectively alleviate the symptoms and suspected symptoms of COVID-19. Based on this observation, there are too few

cases collected, and a treatment course of only 2 and a half days is too short. Future research can extend the treatment time and add more cases. In order to prove the efficacy of *fuhuo tea* more objectively. These conclusions can be used as a reference for coexistence with COVID-19.

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