Good Health and Well Being: Discussion from the Perspective of TCM on Post Covid-19 Symptoms

Yong Yii Pin^{1*}, Heng Aik Teng¹, Wong Ling Shing¹, Leong May Ho¹

¹Faculty of Health and Life Sciences, INTI International University, Putra Nilai, 71800 Nilai, Negeri Sembilan, Malaysia

*Email: yiipin.yong@newinti.edu.my

Abstract

Sustainable healthcare and well-being are major concerns in modern society. However, the healthcare support will be under great pressure, especially under critical period of time, for example the recent COVID-19 pandemic. As the pandemic is getting under control gradually, long-term consequences of COVID-19 infection are discovered, known as Long Covid syndrome, has emerged as a healthcare issue in global community. Due to the variation of symptoms, most of them are not consuming any medication but only to observe and rest. However in China, there were studies that showed Chinese medicine used to treat post COVID-19 symptoms and improve quality of life better. This article aimed to discuss the impact of Long Covid syndrome and its management from Traditional Chinese Medicine perspectives. With the success in using traditional treatments on Long Covid syndrome, more studies on traditional treatments in dealing with Long Covid-19 syndrome should be conducted to provide more holistic healthcare to the communities.

Keywords

Sustainable healthcare, Traditional Chinese Medicine, Alternative medicine

Introduction

Healthcare has been taken as a huge contributor to the wellbeing of the society. Since the first confirmed case of a new coronavirus patient was discovered in December 2019, there has been a global surge and out of control of the new coronavirus epidemic in the following two years known as COVID-19. The acute symptoms of a COVID-19 infected patient had been well identified in various studies which majority of them showed fever, sore throat, cough, shortness of breath, and chest pain (Shi, et al., 2020). Sometimes even involved with multi-organ dysfunction or damage (Gavriatopoulou, et al., 2020). But most of the acute symptoms is mild in the majority of the patients or even asymptomatic. However, there is a misconception that all patients with COVID-19 may recover within two weeks; this is not always the case. The long-term consequences of COVID-19 infection are discovered too (Al-Jahdhami, Al-Naamani, & Al-Mawali, 2021).

Submission: 28 June 2022; Acceptance: 27 September 2022



The clinical characteristics during acute stage of COVID-19 in Malaysia and its risk factors that associated with disease severity were studied (Sim, et al., 2020). A clinical study conducted by the Ministry of Health involving 1,004 patients from categories 4 and 5 of COVID-19 diseases who received follow-up treatment on the infection, 66% of the patients suffered from the Long Covid syndrome and the five symptoms often experienced by former Covid-19 patients were fatigue, exertional dyspnea, insomnia, cough and anxiety (Arumugam, 2021). Together with its impact in metal health which caused anxiety disorders, post traumatic stress disorders, obsessive-compulsive disorders and aversive social effects of isolation were also seen (Shanmugam, Juhari, Nair, Ken, & Guan, 2020).

Long Covid-19 Symptom

Prolonged recovery of symptoms has been described even in patients who had mild symptoms and did not require hospitalization. In general, Long Covid syndrome described among patients who have recovered from COVID-19 but still have ongoing symptoms or among those who continued to have symptoms for longer than normally expected (Mahase, 2020). The symptoms might be cyclical in some patients and variation of symptoms showed in the presentation of post COVID-19 syndrome (Nath, 2020). The centers for Disease Control and Prevention also known as CDC stated that Post-COVID conditions can be ongoing for more than four weeks after first being infected, this is also known as Long COVID-19 syndrome (Centers for Disease Control and Prevention, 2022). There was a study of previously hospitalised patients with COVID-19 found out 67% of them had a decrease in their quality of life at six months of follow-up (Taboada, et al., 2020).

It's been suggested that the symptoms observed in Long Covid may be associated with the lasting inflammation, most of the researchers agree that symptoms are associated with the ability of the virus to initiate an immense inflammatory response referred to as "cytokine storm" (Ahmad, et al., 2021). Patients may present with non-specific symptoms such as fatigue, muscle aches and pains, poor sleep, cough, and breathlessness, to more specific organ-related symptoms, such as orthopnea, leg swelling, and exercise intolerance due to COVID-19 induced heart failure (Outhoff, 2020). Furthermore, chest pain and significant breathlessness might be due to pulmonary embolism. Autonomic symptoms such as palpitations with mild exertion, night sweats, and poor temperature control were also described (Varatharaj, et al., 2020). From all the symptoms mentioned above that arising from COVID-19, not only increased disability and negatively impacted physical function, but also affected participation in general life activities and the ability to work (Tabacof, et al., 2022).

Long Covid-19 Symptom Management

Long COVID-19 syndrome management remains a clinical challenge as there are no evidence-based international guidelines to follow (Al-Jahdhami, Al-Naamani, & Al-Mawali, 2021). In some studies shown, pulmonary embolism is managed in the usual way with anticoagulation for at least three months, while pirfenidone and nintedanib are the two approved antifibrotic drugs for the management of pulmonary fibrosis but antifibrotic therapy need to be personalized and still remain

unclear (Vasarmidi, Tsitoura, Spandidos, Tzanakis, & Antoniou, 2020). Meanwhile the management plan for Long COVID-19 syndrome in Malaysia is depending on clinical need and local pathways, where patient can get support from integrated and coordinated primary care, community, rehabilitation and mental health services. They can get referral to an integrated multidisciplinary assessment service or to specialist care for specific complications.

In Malaysia, some public hospitals such as University Malaya Medical Centre and Sungai Buloh Hospital provide dedicated Long Covid clinics. Private hospitals and medical centres are setting up post-Covid health checks, rehabilitation, and recovery programmes (Ministry of Health Malaysia, 2021). However it was mentioned that there is a lot of discussion regarding the need for acute hospital beds, ICUs, and so on but not enough regarding the need to prepare short-term and medium-term rehabilitation facilities that will allow patients to recover faster, that could have subsequent impact on social and economic activities (Murad, 2021).

Traditional Chinese Medicine and Long Covid-19 Symptom

China has integrated TCM into the diagnosis and treatment of this new coronavirus disease, and has published protocols including the "New Coronavirus Pneumonia Diagnosis and Treatment Plan" (State Administration of Traditional Chinese Medicine of the People's Republic of China, 2022). The plan provides a reference for the diagnosis and treatment of patients with SARS-CoV-2 and emphasizes the importance of adapting treatment options to the characteristics of the symptoms in patients in different regions. In the fourth version of the diagnosis and treatment protocol, the disease was classified into four stages based on different diagnosis (State Administration of Traditional Chinese Medicine of the People's Republic of China, 2022).

Human body is understood to be a holism in Chinese Medicine theory, which connecting the external manifestation to the internal environment. Internal five organs like Lung, Heart, Spleen, Liver and Lung function to control and regulate the vital substances in Chinese Medicine. It was mentioned that: "With strong Healthy Qi, Evil Qi will not harm" in the book of Yellow Emporer's Classic. There was a review differentiating the recovery patient who undergo mild and moderate stage before or recovery patients that undergo severe or critical stage before. The syndrome occurred in recovery patient who undergo mild and moderate stage before, can be seen as Qi and Yin deficiency in Spleen and Stomach, weakness in Spleen and Stomach etc. For those recovery patient who undergo severe or critical stage, phlegmatic heat obstruct in Lung syndrome, Lung heat with fluid deficiency syndrome, Yang deficiency in Spleen and Kidney syndrome etc can be seen. These were categorised based on the severity of disease and the affected Organs or location involved (Jinli, et al., 2021).

The symptoms of Long Covid patients and their quality of life were observed and found to be improved after prescribing the Chinese Medicine (Suofang, et al., 2020). Different rehabilitation for lung function of patients with different stage of post-COVID 19 symptoms were treated with functional training, traditional acupuncture and massage (Dekun, Yucong, Zikai, & Jian, 2020). TCM functional exercise like Qi Gong and Tai Ji applied early during recovery process of the disease in the study showed that the exercises improved patient's health both physically and mentally (Dengjun, et al., 2020). In a nutshell, the researchers explored and concluded that the

TCM treatment can fasten the recovery process of post-COVID 19 symptoms (Yong, et al., 2020). Thus, more studies on traditional treatments in dealing with Long Covid-19 syndrome should be conducted to provide more holistic healthcare to the communities.

Acknowledgements

The authors wish to express gratitude to INTI International University for funding this project with research grant ID: INTI-FHLS-13-02-2021.

References

- Ahmad, M., Shaik, R., Ahmad, R., Yusuf, M., Khan, M., Almutairi, A., . . . Almutairi, S. (2021). "LONG COVID": an insight. *European Review for Medical and Pharmacological Sciences*, 5561-5577.
- Al-Jahdhami, I., Al-Naamani, K., & Al-Mawali, A. (2021). The Post-acute COVID-19 Syndrome (Long COVID). *Oman Medical Journal*, e220.
- Arumugam, T. (2021, 6 11). *New Straits Times*. Retrieved from Malaysians cautioned on Long Covid or Post-Covid-19 Syndrome: https://www.nst.com.my/news/nation/2021/06/697991/malaysians-cautioned-long-covid-or-post-covid-19-syndrome
- Centers for Disease Control and Prevention. (2022, 5 5). Retrieved from Long COVID or Post-COVID Conditions: https://www.cdc.gov/coronavirus/2019-ncov/long-term-effects/index.html
- Dekun, L., Yucong, Z., Zikai, J., & Jian, D. (2020). Discussion on Rehabilitation of Novel Coronavirus Pneumonia Patients with TCM and Modern Rehabilitation. *Clinical Journal of Traditional Chinese Medicine*, 832-836.
- Dengjun, H., Binhui, L., Lei, G., Shuang, Q., Jingxia, H., Yi, L., . . . Chan, P. (2020). Discussion on the Application of Traditional Chinese Medicine Functional Exercise in Prevention and Rehabilitation of COVID-19 Based on the Thought of "Preventive Treatment of Disease". *Journal of Hunan University of Chinese Medicine*, 1261-1265.
- Gavriatopoulou, M., Korompoki, E., Fotiou, D., Ntanasis-Stathopoulos, L., Psaltopoulou, T., Kastritis, E., . . . Dimopoulos, M. A. (2020). Organ-specific manifestations of COVID-19 infection. *Clinical and experimental medicine*, 493-506.
- Jinli, Z., Shuo, Z., Yunpu, Q., Jihong, F., Fengwen, Y., & Boli, Z. (2021). Review of The Sequelae of the Coronavirus Disease 2019(COVID-19) and the Rehabilitation Strategy with Integrative Chinese and Western Medicine. *Journal of Traditional Chinese Medicine*, 1-6.
- Lee, S. (2014). Plasma Focus Radiative Model: Review of the Lee Model Code. *Journal of Fusion Energy*, 33, 319–335.
- Mahase, E. (2020). Covid-19: What do we know about "long covid"? BM, 370.
- Ministry of Health Malaysia. (2021, 7 12). Retrieved from Post COVID-19 management protocol: https://covid-19.moh.gov.my/garis-panduan/garis-panduan-kkm/ANNEX_50_POST_COVID-19_MANAGEMENT_PROTOCOL_12JULY2021.pdf

- Murad, D. (2021, 9 5). *The Star*. Retrieved from Long Covid: Recovery and Support: https://www.thestar.com.my/news/focus/2021/09/05/long-covid-recovery-and-support Nath, A. (2020). Long-Haul COVID. *Neurology*, 559-560.
- Outhoff, K. (2020). Sick and tired of COVID-19: long haulers and post viral (fatigue) syndromes. *South African General Practitioner Journal*, 132-133.
- Shanmugam, H., Juhari, J. A., Nair, P., Ken, C. S., & Guan, N. C. (2020). Impacts on COVID-19 Pandemic on Mental Health in Malaysia: A Single Thread of Hope. *Malaysia Journal of Psychiatry Ejournal*.
- Shi, S., Qin, M., Shen, B., Cai, Y., Liu, T., Yang, F., . . . Huang, C. (2020). Association of Cardiac Injury With Mortality in Hospitalized Patients With COVID-19 in Wuhan, China. *JAMA Cardiology*, 802-810.
- Sim, B. L., Chidambaram, S. K., Wong, X. C., Pathmanathan, M. D., Peariasamy, K. M., Hor, C. P., . . . Goh, P. P. (2020). Clinical characteristics and risk factors for severe COVID-19 infections in Malaysia: A nationwide observational study. *The Lancet Regional Health. Western Pacific*, 100055.
- State Administration of Traditional Chinese Medicine of the People's Republic of China. (2022, 3 17). Retrieved from Diagnosis and Treatment Protocol for COVID-19: http://www.satcm.gov.cn/
- Suofang, S., Zhuyuan, F., Kan, X., Deliang, Y., Weimin, W., Yongchang, C., . . . Bohan, W. (2020). Clinical Observation of the Rehabilitation Formula for Banking up Earth to Generate Metal in Treating COVID-19 Patients with Deficiency of Lung and Spleen Syndrome in the Recovery Stage. *Journal of Nanjing University of Traditional Chinese Medicine*, 281-285.
- Tabacof, L., Tosto-Mancuso, J., Wood, J., Cortes, M., Kontorovich, A., McCarthy, D., . . . Putrino, D. (2022). Post-acute COVID-19 Syndrome Negatively Impacts Physical Function, Cognitive Function, Health-Related Quality of Life, and Participation. *American Journal of Physical Medicine & Rehabilitation*, 48-52.
- Taboada, M., Moreno, E., Carinena, A., Rey, T., Pita-Romero, R., Leal, S., . . . Seoane-Pillado, T. (2020). Quality of life, functional status, and persistent symptoms after intensive care of COVID-19 patients. *British Journal of Anaesthesia*, e110-e113.
- Varatharaj, A., Thomas, N., Ellul, M. A., Davies, N. W., Pollak, T. A., Tenorio, E. L., . . . Nicholson, T. R. (2020). Neurological and neuropsychiatric complications of COVID-19 in 153 patients: a UK-wide surveillance study. *Elsevier Public Health Emergency Collection*, 875-882.
- Vasarmidi, E., Tsitoura, E., Spandidos, D. A., Tzanakis, N., & Antoniou, K. M. (2020). Pulmonary fibrosis in the aftermath of the Covid-19 era (Review). *Experimental and therapeutic medicine*, 2557-2560.
- Yong, C., Zhaolong, C., Xiaomei, X., Jie, W., Ling, L., & Yi, R. (2020). Reflection and Exploration on Rehabilitation Treatment of COVID-19 Patients with Traditional Chinese Medicine. *Journal of Emergency in Traditional Chinese Medicine*, 1693-1695.