

A Pilot Study on the Effect of Zhineng Qigong Remote Intervention on Eliminating the Symptoms of Confirmed and Suspected Cases of Covid-19

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Abstract: Objective: To evaluate the effect of remote intervention of Zhineng Qigong in eliminating the symptoms of confirmed and suspected cases of Covid-19. **Method:** Zhineng Qigong teacher and the subjects log into zoom meeting at the same time. The former uses Zhineng Qigong methods to remotely intervene on the latter, 6 times a week, 2 hours each time. After 5-28 days of intervention, compare the symptoms of the end point of the study with those of the baseline. **Results:** The total effective rate of symptom elimination in 64 confirmed or suspected cases of Covid-19 after 5~28 days of Zhineng Qigong intervention was 92.19%, among which, the symptoms of 29.69% subjects eliminated to none. No adverse reactions were found in the intervention process. **Conclusion:** Zhineng Qigong remote intervention can eliminate the symptoms of confirmed or suspected cases of Covid-19.

Key words: Zhineng Qigong, remote intervention, Covid-19

In 2020, the pandemic caused by SARS-CoV-2 spread rapidly around the world and became a public health emergency of international concern. It was in such a context that Traditional Chinese Medicine (hereinafter referred to as TCM) and modern medicine joined hands and successfully curbed the spread of the pandemic in China. In addition to the well-known Chinese herbs in Traditional Chinese Medicine (TCM) system, medical Qigong also played an important role in the rehabilitation of patients of COVID-19.

Guidelines for the diagnosis, treatment and rehabilitation of patients of Covid-19 created by medical authorities recommended medical Qigong methods for rehabilitation. "TCM Experts' Consensus on Rehabilitation of Patients with New Coronavirus Pneumonia" (First Edition) listed Eight Pieces of Brocade, Tai Chi, Respiratory Guidance, and Six-Word Formula as rehabilitation training methods for COVID-19. ^[1] "TCM Manual for the Diagnosis and Treatment of New Coronavirus Pneumonia" recommends that patients recovering from Covid-19 practice Tai Chi and Eight Pieces of Brocade to speed up the recovery process. ^[2] "TCM Rehabilitation Guidance for Patients of Covid-19 (Trial)" recommends Eight Pieces of Brocade, Tai Chi, Six-Word Formula, Respiratory Healing Method and "Three One Two" method to people who are released from quarantine and those who meet hospital discharge criteria. ^[3] "Guiding Opinions on Respiratory Rehabilitation of People of Covid-19 (Second Edition)" lists Eight Pieces of Brocade, Tai Chi, Respiratory Guidance, and Six-Word Formula as TCM breathing rehabilitation method for patients of mild and common type of Covid-19. ^[4] "TCM Guidelines for the Prevention and early Intervention of New Coronary Pneumonia in Guangdong Province " takes Tai Chi, Eight Pieces of Brocade, and Yijinjing as part of "lifestyle care". ^[5]

In the above manuals, medical Qigong is mainly recommended as a rehabilitation method for people of COVID-19. Is it possible to apply it as an intervention to eliminate the symptoms of Covid-19? This pilot study aims to evaluate the effect of Zhineng Qigong remote intervention on eliminating the symptoms of confirmed and suspected cases of Covid-19.

Zhineng Qigong is a branch of Qigong created by Dr Pang Ming, who offered Zhineng Qigong healing and training to people with various diseases, including some incurable ones such as tumors,

heart disease, diabetes, etc. His way of training and healing became so popular that the Center he founded in 1980 in a remote village in Hebei Province, China, became the largest drug-free hospital in the world. Tens of thousands of documented successful cases were collected over a period of 13 years. In 1997, Zhineng Qigong was selected as one of 21 qigong methods for promotion by the National Sports Commission. ^[6]

This study follows the principle of voluntary registration. The researcher distributes an online application form to confirmed subjects of Covid-19 and subjects with symptoms of Covid-19. After the subjects sign the informed consent form, they are admitted to Zhineng Qigong Anti-Covid-19 group organized by teacher Zhen Qingchuan. Members of the group log in to zoom meeting at the specified time. Teacher Zhen uses the method of Zhineng Qigong to provide remote intervention, 6 times a week, about 2 hours each time. After 5-28 days of intervention, a before and after comparison in terms of the subjects' symptoms is made and the results are analyzed.

1 General information

1.1 Case resource: From December 18, 2020 to March 16, 2021, a total of 64 confirmed and suspected cases of Covid-19 submitted Zhineng Qigong Online Session Application Form and finished the required sessions, including 17 males and 47 females, aged 25-96, average (54.0±14.0) years old. The nationality of the cases is shown in Table 1.

Table 1 Nationality of the Cases

Nationality	Mexico	Argentina	Peru	Italy	Ecuador	Chile
<i>n</i> (%)	42(65.63)	14(21.88)	5(7.81)	1(1.56)	1(1.56)	1(1.56)

1.2 Diagnostic criteria: ① Confirmed cases: Those who can provide a positive result of PCR test within 7 days; ② Suspected case: People with common symptoms of Covid-19 such as fever, cough, short of breath, choking sensation, gastrointestinal reactions, or people who had epidemiologic history.

1.3 Inclusion criteria: ① Meet the above diagnostic criteria; ② Non-hospitalized; ③ Agree to participate in this study and sign an informed consent form.

1.4 Exclusion criteria ① Participate in online session for less than 5 times.

1.5 Evaluation criteria ① Symptom change

2 Methodology

2.1 Method of intervention

Online intervention with Zhineng Qigong is adopted including theoretical explanation and Zhineng Qigong group practice.

2.2 Evaluation method: The subjects fill in the forms for phase 2, 3, 4 and 5 on the 7th, 14th, 21st and 28th day of his/her online session; Compare the final chief complaints obtained after 5~28 days of Zhineng Qigong intervention with those at the baseline period.

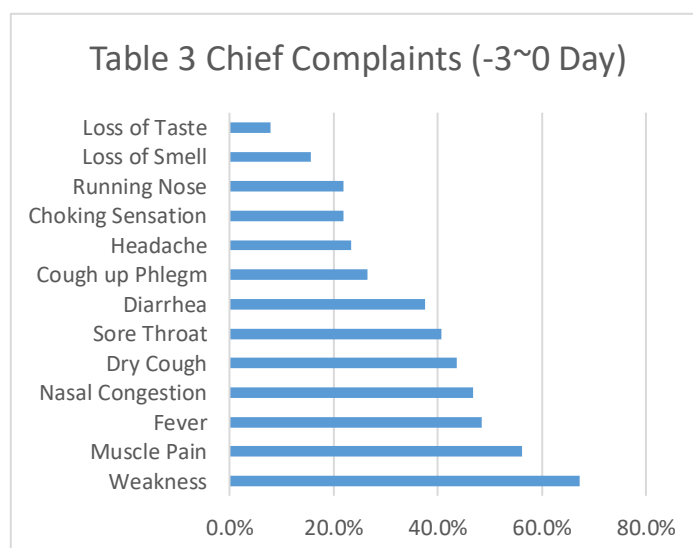
3 Result

57.8% of the 64 subjects have epidemiologic history and 42.2% do not (Table 2).

Table 2 Epidemiologic History

Epidemiologic History	Yes/Si	No/No
<i>n</i> (%)	37(57.8)	27(42.2)

The chief complaints of the 64 subjects in the baseline period are weakness (67.19%), muscle pain (57.81%), fever (48.44%), nasal congestion (46.88%), dry cough (43.75%), sore throat (40.63%), diarrhea (37.50%), Cough up Phlegm (26.56%), Headache (23.44%), Choking Sensation (21.88%), Running Nose (21.88%), Loss of Smell (15.63%), loss of taste (7.81%), etc. (Table 3 and Table 4)



After Zhineng Qigong remote intervention, the common symptoms in the chief complaints of 64 cases (in this article, the symptoms that appeared in no less than 5 cases are considered common symptoms) are eliminated to varying degrees. Among them, symptoms such as diarrhea, fever, loss of smell, running nose, nasal congestion, cough up phlegm have higher elimination rates, which are 91.67%, 90.32%, 90%, 85.71%, 83.33%, and 82.35% respectively. (Table 4)

Table 4 Change of chief complaints before and after intervention [*n* (%)]

Chief Complaints	-3~0 Day	5~28 Day	Elimination of an individual symptom
Weakness	43(67.19)	19(29.69)	24(55.81)
Muscle Pain	36(56.25)	13(20.31)	23(63.89)
Fever	31(48.44)	3(4.69)	28(90.32)
Nasal Congestion	30(46.88)	5(7.81)	25(83.33)
Dry Cough	28(43.75)	16(25)	12(42.86)
Sore Throat	26(40.63)	7(10.94)	19(73.08)
Diarrhea	24(37.5)	2(3.13)	22(91.67)
Cough up Phlegm	17(26.56)	3(4.69)	14(82.35)
Headache	15(23.44)	5(7.81)	10(66.67)
Choking Sensation	14(21.88)	6(9.38)	8(57.14)
Running Nose	14(21.88)	2(3.13)	12(85.71)
Loss of Smell	10(15.63)	1(1.56)	9(90)
Loss of Taste	5(7.81)	1(1.56)	4(80)

Joint Pain	2(3.13)	2(3.13)	0(0)
Stomachache	3(4.69)	0(0)	3(100)
Short of Breath	2(3.13)	3(4.69)	-1(-50)
Abdominal Pain	2(3.13)	0(0)	2(100)
feel cold	2(3.13)	1(1.56)	1(50)
Dizziness	1(1.56)	1(1.56)	0(0)
Hot Flashes	1(1.56)	1(1.56)	0(0)
Dry Nose	1(1.56)	0(0)	1(100)
Constant Urination	1(1.56)	0(0)	1(100)
Palpitation	1(1.56)	0(0)	1(100)

Chief complaints include main symptoms and secondary symptoms. The main symptoms best reflect the cause and pathogenesis of the disease, and is the key in syndrome differentiation of TCM. The most common main symptoms of the 64 confirmed and suspected cases of Covid-19 in the baseline period are muscle pain (34.38%), fever (25%), headache (23.44%), weakness (18.75%), sore throat (18.75%), loss of smell (15.63%), dry cough (14.06%), cough up phlegm (14.06%), running nose (9.38%), choking sensation (9.38%), nasal congestion (9.38%), diarrhea (7.81%) and loss of taste (7.81%), etc. (Table 5 and Table 6)

After Zhineng Qigong intervention, these symptoms are eliminated to varying degrees. Among them, cough up phlegm, diarrhea, loss of smell, fever, sore throat, running nose, nasal congestion, loss of taste have higher elimination rates, which are 100%, 100%, 90%, 87.5%, 83.33%, 83.33%, 83.33%, and 80% respectively. (Table 6)

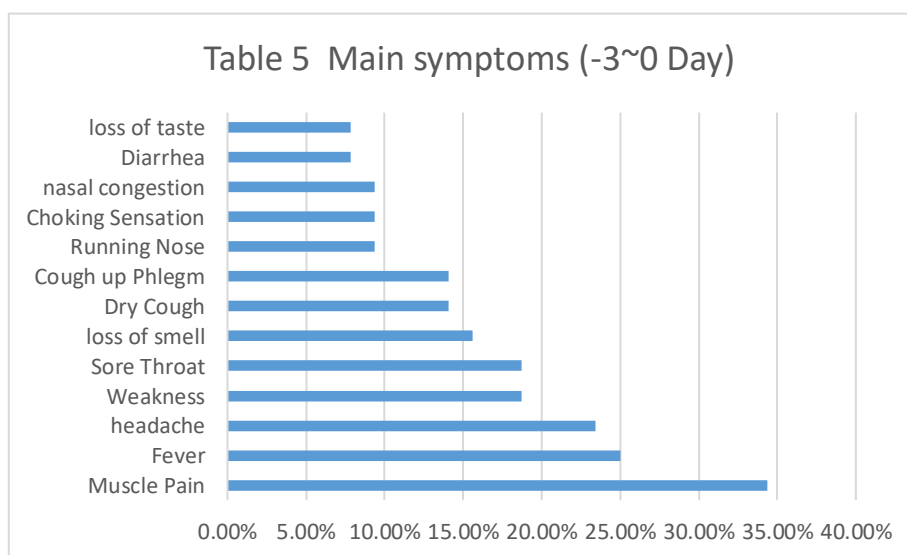


Table 6 Change of main symptoms before and after intervention [n (%)]

main symptoms	-3~0 Day	5~28 Day	Elimination of an individual symptom
Muscle Pain	22(34.38)	8(12.5)	14(63.64)
Fever	16(25.00)	2(3.13)	14(87.5)
headache	15(23.44)	5(7.81)	10(66.67)
Weakness	12(18.75)	6(9.38)	6(50.00)

Sore Throat	12(18.75)	2(3.13)	10(83.33)
loss of smell	10(15.63)	1(1.56)	9(90.00)
Dry Cough	9(14.06)	13(20.31)	-4(-44.44)
Cough up Phlegm	9(14.06)	0(0.00)	9(100.00)
Running Nose	6(9.38)	1(1.56)	5(83.33)
Choking Sensation	6(9.38)	2(3.13)	4(66.67)
nasal congestion	6(9.38)	1(1.56)	5(83.33)
Diarrhea	5(7.81)	0(0.00)	5(100.00)
loss of taste	5(7.81)	1(1.56)	4(80.00)
stomachache	3(4.69)	0(0.00)	3(100.00)
joint pain	2(3.13)	2(3.13)	0(0.00)
Abdominal pain	2(3.13)	0(0.00)	2(100.00)
short of breath	2(3.13)	3(4.69)	-1(-50.00)
feel cold	2(3.13)	1(1.56)	1(50.00)
dry nose	1(1.56)	0(0.00)	1(100.00)
constant urination	1(1.56)	0(0.00)	1(100.00)
dizziness	1(1.56)	1(1.56)	0(0.00)
hot flashes	1(1.56)	1(1.56)	0(0.00)

Table 6 shows that the elimination rate of dry cough after 5-28 days' intervention was -44.44%, indicating that after the intervention, the incidence of dry cough in the main symptom did not decrease but increased. In the chief complaints, the elimination rate of dry cough after intervention dropped by 42.86%. This result indicates that dry cough is a secondary symptom in the baseline period of some subjects, but became the main symptom since the old main symptom in the chief complaints disappeared after 5-28 days of intervention.

Comparing the final chief complaints of the 64 cases obtained after 5~28 days of Zhineng Qigong intervention with those at the baseline period, it is found that the symptoms of 62.5% cases were eliminated, those of 29.69% cases were eliminated to none, those of 6.25% cases change to other symptoms and those of 1.56 % increased. (table 7) The total effective rate of symptom elimination in 64 confirmed or suspected cases of Covid-19 after 5~28 days of Zhineng Qigong intervention was 92.19%, among which, the symptoms of 29.69% subjects were eliminated to none. (Table 7)

Table 7 Classification of the change of chief complaints before and after intervention

Classification of the change	[n (%)]
eliminated	40(62.5)
eliminated to none	19(29.69)
Change to other symptoms	4(6.25)
Increased	1(1.56)

4 Discussion

In TCM no matter the essence-qi-Shen theory in the micro perspective or the qi-origin theory in the macro perspective, qi is the foundation, and it is believed that qi is the basic substance that

constitutes everything. This idea runs through the secondary disciplines of Traditional Chinese Medicine--- acupuncture and Tuina, Chinese medicine, and medical Qigong. Acupuncture and Tuina aims at stimulating the genuine qi. Chinese medicine cures diseases by correcting the deviated qi of the human body with the deviated qi of Chinese medicine. Medical Qigong is even more so. It achieves the goal of curing diseases and prolonging one's life by collecting qi from the universe and practicing one's own qi. Therefore, theoretically, Qigong can achieve the same effect as Chinese medicine.

From the results obtained in this study, after 5-28 days of remote intervention, the total effective rate of Zhineng Qigong in reducing the symptoms of confirmed or suspected cases of Covid-19 is 92.19%, which is in line with the results issued by the official website of the Central People's Government of the People's Republic of China "The total effective rate of Chinese medicine in the treatment of Covid-19 is more than 90%" [7]. The results of the study provide statistical support that Zhineng Qigong can achieve the same effect as traditional Chinese medicine in the treatment of Covid-19. Moreover, Zhineng Qigong remote intervention used in this study is non-invasive, non-contact, non-radiative, non-medicinal and non-face-to-face. It can even be performed thousands of miles away. Only through theoretical explanations, language guidance and practice, can the goal of reducing or eliminating symptoms be achieved. The cost is low and the risk of infection is avoided. Thus, it may be regarded as a high-quality solution to Covid-19 pandemic and deserves more attention and promotion.

In this study, the change of symptoms was used as evaluation index. It was decided based on the following considerations, and also accompanied by some shortcomings:

① The functional state of the human body and the physiological indicators are not synchronous. When a person is sick, malfunction occurs before the physiological indicators become abnormal. After treatment however the recovery of human functions comes later than the recovery of physiological indicators. This is also a dividing line between modern medicine and traditional Chinese medicine. The former takes physiological indicators as the gold standard, while the latter takes "symptoms" as an important criterion for diagnosis. The same is true with Covid-19. Covid-19 patients are usually discharged from the hospital based on the number of days after the fever disappears, two PCR tests turning negative, and the chest imaging turning normal. But it is found that the results of PCR test and chest imaging are not synchronized with symptoms. [2] A large number of patients still have symptoms such as cough and weakness after their physiological indicators return to normal and meet the discharge standards. From this perspective, using symptoms as evaluation criteria is stricter than PCR test and chest imaging. But on the other hand, as the coronavirus mutates, asymptomatic COVID-19 patients appeared and evaluation based on symptoms is not suitable for them. This is one of the shortcomings in the design of this study.

② This study was carried out when covid-19 pandemic was raging. Only some subjects can provide PCR test results both at the baseline period and after completing the intervention due to lack of medical resources, etc. This is another shortcoming in terms of the evaluation of the results in the study.

③ Regarding the weighted score of symptoms: In this study, not only was the remote intervention conducted online, but also the information reporting at each stage was completed online. When designing the study, the method of weighing and scoring the symptoms was not adopted for fear that too much work for the subjects may reduce the validity of the forms and that the subjects may not be able to conform to the same criteria for the severity of each symptom.

However, the pilot study showed that the subjects are able to judge the severity of their symptoms rather objectively. Therefore, in the future study, we will consider increasing the weighted score of symptoms. With it, it is possible for us to have more insights into those cases whose symptoms increased after intervention and those whose baseline symptoms changed to other symptoms at the end point.

In the future study, we hope to cooperate with relevant institutions to collect data on symptoms, laboratory examinations, chest imaging, PCR tests at different intervention stages, and adopt weighted scores to them. This will help make a comprehensive evaluation of the effect of Zhineng Qigong remote intervention on Covid-19.

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