



An Analysis of Siddha Management among COVID-19 Positive Patients of TPEC COVID Care Center, Vellore, Tamilnadu —Feedback report

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Abstract

Siddha's system of medicine is the effective one to reduce the symptoms of many viral illnesses. Siddha's system of medicine in asymptomatic, mild to moderate Covid-19 Positive patients, will make them recognize its effectiveness, reduce the symptoms, and move into the traditional approach towards the deadliest pandemic disease Covid-19. The objective of this study is to evaluate the acceptance and benefit of integrative Siddha management among the mild, moderate and asymptomatic COVID patients through a feedback questionnaire in TPEC COVID Care Center, Vellore, Tamil Nadu (TPEC-Thanthai Periyar Engineering College). 74 asymptomatic, mild to moderate Covid-19 Positive patients were observed 7 days from 14.07.2020 to 30.07.2020 in TPEC COVID Care Center, Vellore, Tamil Nadu. During this period, Siddha medicines were administrated along with Western medicine. At the end of the period, validated feedback questionnaires were used to collect information from 74 participants for evaluating the acceptance and benefit of integrative Siddha management. In the 74 patients of TPEC COVID Care Center, Vellore, 100% were taken the given Siddha drug properly. 82.4% had the most common symptoms and 52.7% had less common symptoms. 16.2% of cases developed gastric acidity and 1.3% developed mild dyspnea as an ADR. 91.8% were recommended the Siddha system to others. 93.2% reported excellent disease progress. 90.7% of Siddha doctors quoted for 'Excellent' service on covid patients. This feedback report explores the three important significance. (a) Siddha medicine having significant effectiveness (b) Siddha medicines have safety in covid-19 patients (c) overall services of Siddha doctors are appreciable by the patients and Siddha system is recommended to others. This analysis report helps to provide the possibility of the Siddha system for further or future clinical trials.

Keywords: COVID Care Center, Integrative Medicine, SARS CoV-2, Novel Corona Virus, Siddha System of Medicine

1. Introduction

Siddha System of Medicine (SSM) is one the oldest South Indian medical system, a part of the AYUSH medical system in India. SSM is growing popular in recent years during various viral outbreaks like Dengue, Chikungunya, Swine Flu because of its efficacious anti-viral drugs. Siddha Medicine is a valuable therapeutic choice that is classically used for treating viral respiratory infections, this principle of medicine is proven to contain antiviral compounds¹.

The coronavirus disease 19 (COVID-19) pandemic is unique and unprecedented in several aspects and has challenged health care systems. At present, the global momentum is unabated, and a second wave is anticipated². It is another pathogenic viral infection caused by a novel coronavirus, labeled as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) transmitted across the animal-human interface. Studies have indicated that its pathogens spread through populations by transmission through respiratory droplets, contact, and natural aerosols³. All ages are susceptible. Infection is transmitted

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through large droplets generated during coughing and sneezing by symptomatic patients but can also occur from asymptomatic people and before the onset of symptoms⁴. The mean incubation period of SARS-CoV-2 is estimated to be 3–7 days (range, 2–14 days)⁵. Moreover, it has been reported that asymptomatic COVID-19 patients during their incubation periods can effectively transmit SARS-CoV-2. World governments are at work to establish countermeasures to stem the devastating effects and it has been estimated that strict shutdowns may have saved 3 million lives across 11 European countries⁶.

This novel coronavirus is spreading from human to human very rapidly in most countries all around the world. There is no exception for India, which has the largest population in the world. Tamil Nadu, one of the states in India, is having a very fast spread of the Covid-19 virus, and it's the most challenging one to control and manage the disease. Every society has its medical system, which is deeply rooted in its culture and guided by its philosophy of life. Being culturally and linguistically diverse countries, there developed several types of Traditional Medicines (TM) based on practices, skill, traditional knowledge based on beliefs, theories, and experiences indigenous to different cultures⁷. Ancient siddhars defined 4448 diseases on earth, therefore these all-time tested medical systems with specific treatment and management with clear prognosis with standard treatment protocol of Siddha medical system also COVID-19's signs and symptoms were mostly correlated with Suram(Fever) in Sri Lankan Siddha medical text respectively⁸. Many Siddha COVID Care Centers are operated by Govt of Tamilnadu to monitor the positive asymptomatic, mild to moderate Covid-19 cases. TPEC is one of the centers, which was initiated on July 10th by the District Collector of Vellore and has treated 3000 Covid positive patients so far (TPEC-ThanthaiPeriyar Engineering College). The unique property of TPEC CCC is the integrative approach by both Siddha and Allopathy doctors for the well-being of the patients.

2. Symptoms of Covid-19⁹

People with COVID-19 have had a wide range of symptoms reported – ranging from mild symptoms to severe illness. Symptoms may appear 2-14 days after exposure to the virus. People with these symptoms may have COVID-19:

- Fever or chills
- Cough
- Shortness of breath or difficulty breathing
- Fatigue

- Muscle or body aches
- Headache
- New loss of taste or smell
- Sore throat
- Congestion or runny nose
- Nausea or vomiting
- Diarrhea

3. Complications of Covid-19¹⁰

- Coagulopathy, mainly disseminated intravascular coagulation, venous thromboembolism, elevated D-dimer, and prolonged prothrombin time.
- Laryngeal edema and laryngitis in critically ill patients with COVID-19.
- Necrotizing pneumonia due to superinfection caused by secreting *Staphylococcus aureus* infection. This superinfection is usually fatal.
- Cardiovascular complications, including acute pericarditis, left ventricular dysfunction, acute myocardial injury (associated with increased serum troponin), new or worsening arrhythmias, and new or worsening heart failure.
- Acute respiratory failure. Approximately 5% of COVID-19 patients require admittance to an intensive care unit because they develop severe disease complicated by acute respiratory distress syndrome.
- Sepsis, septic shock, and multiple organ failure.
- Higher risk of death, particularly in male patients with severe disease, presence of heart injury and cardiac complications, hyperglycemia, and patients receiving high doses of corticosteroids.
- Ventilation-associated pneumonia in up to 30% of patients requiring intensive mechanical ventilation.
- Massive pulmonary embolism is complicated by acute right-sided heart failure.

4. Objective

To evaluate the acceptance and benefit of integrative Siddha management among the mild, moderate, and asymptomatic COVID patients through feedback questionnaire in TPEC COVID Care Center, Vellore, Tamil Nadu.

5. Methodology

Written consent was mandatory from each patient before inclusion in the feedback analysis study. Feedback data

were collected from 74 patients including 36 males and 38 females of TPEC COVID Care Center, Vellore. Patients from this site were closely observed by the integrative medical team of Siddha and the Western medical system. In the period 14.07.2020 to 30.07.2020, a total of 74 patients including mild, moderate, and asymptomatic cases who gave consent for Siddha medicines were observed and collected feedback reports from them.

6. Questionnaire

Covid-19 Positive Patients feedback forms were distributed to the participants with consent which consist of nine open-ended yes or no type of questions, qualitative (Tables 1, 2). Physically filled and the data was electronically documented.

The study asked specific questions related to the benefits of Siddha medicines and interest in Siddha Medicine integration. The questionnaire was transferred manually by printed papers at the end of the treatment or at the time of discharge. In the manual, the feedback was given individually to each of them, given 15 minutes to complete the feedback form. The data were statistically analyzed.

The questionnaire contains 7 questions and has four subdivisions as follows:

- i. Proper drug administration of the patients
- ii. Changes in signs and symptoms
- iii. Any adverse events during the medicine
- iv. Interest in Siddha medicine and services in COVID Care Centers.

Table 1. Questionnaire divisions

S.No.	Feedback questions
Proper drug administration of the patients	
1	Did you take the Siddha drugs given to you properly?
Signs and symptoms	
2	Did you feel the changes in symptoms like fever, throat irritation, and cough during Siddha medicine?
3	Did you feel the changes in symptoms like body pain, loss of taste, loss of smell, and any other during Siddha medicine?
Adverse Drug Reaction	
4	Did you feel any side effects during Siddha medicine? Mention if any.
Interest in Siddha medicine and services in COVID Care Centers	
5	Would you recommend Siddha medical treatment for COVID-19 to others?
6	How do you think about the effectiveness of Siddha medicine in the COVID-19 disease?
7	How was the service of Siddha doctors?

7. Data Analysis

The data analysis procedure consisted of quantitative analysis and thematic content analysis. Descriptive statistics were used to demonstrate the findings of a questionnaire, The completed data forms were collected, and the data were entered manually into a spreadsheet processing program and analyzed.

8. Results

The result shows that 74 patients have participated, 38 (51.4%) of female and 36 (48.6%) of the male were identified.

9. Proper Drug Administration of the Patients

Proper drug administration gave the appropriate result, in this division, the question asked about the drug administration of the patients, will lead to an appropriate report. All 74 patients were involved in this study. 100% (n=74) of the participants were taken the given Siddha drug properly.

10. Changes in Signs and Symptoms

Totally two questions were asked about their symptoms. The most common symptoms of fever, cough, throat

irritation were in the first question, least common symptoms like body pain, loss of taste, and loss of smell were in the second. n=61 (82.4%) had a fever, cough, and throat irritation and n=13 (17.6%) did not have those symptoms and n=39 (52.7%) had a loss of smell and body pain, n=35 (47.2%) did not have those symptoms. n=38 (51.3%) had loss of taste, n=36 (48.6%) did not that symptom.

11. Any Adverse Events during the Medicine

n=61 (82.4%) did not notice any adverse reactions, but 13 (17.6%) have noticed some adverse reactions during drug

administration. In these 13 patients, n=12 had gastric acidity and n=1 had mild dyspnea.

12. Interest in Siddha Medicine and Services in COVID Care Center

Three questions were asked about the effect and recommendations of the Siddha system, also about doctor's services in COVID Care Center. n=68 (91.8%) were recommended the Siddha system to others, and n=6 (8.1%) were won't recommended to others. Ask about the effectiveness of the Siddha system, n=69 were rate as 'Excellent', n=5 were rate as 'No progress'. Services of Siddha doctors on Covid patients, n=67 were noted 'Excellent', n=6 were noted, Good' and n=1 was 'Bad'.

Table 2. Questionnaire divisions

S.No.	Feedback questions (n=74)	Yes		No	
		n	%	n	%
Proper drug administration of the patients					
1	Did you take the Siddha drugs given to you properly	74	100	0	0
Signs and symptoms					
2	Did you feel the changes in symptoms like fever, throat irritation, and cough during Siddha medicine?	61	82.4	13	17.6
3	Did you feel the changes in symptoms like body pain, loss of taste, loss of smell, and any other during Siddha medicine?	39	52.7	35	47.3
Adverse Drug Reaction					
4	Did you feel any side effects during Siddha medicine? Mention if any.	13	17.6	61	82.4
Interest in Siddha medicine and services in COVID Care Center					
5	Would you recommend Siddha medical treatment for COVID-19 to others	68	91.8	06	8.1
		Excellent(n)	Good (n)	No progress(n)	Created Side effects(n)
6	How do you think about the effectiveness of Siddha medicine in the COVID-19 disease?	69	0	05	0
		Excellent (n)	Good (n)	Bad (n)	Worst (n)
7	How was the service of Siddha doctors?	67	6	1	0

13. Discussion

As of August 7, 2020, Siddha treatment has helped to successfully treat 5,725 patients at 11 exclusive Siddha COVID-19 Care Centers (CCC) in Tamil Nadu, including

two in the metro. Chennai's Siddha CCC facilities at JawaharVidyalaya and Dr. Ambedkar Government Arts College in Vyasarpadi, offering Siddha-based treatment for asymptomatic and mild patients, handle high case

loads. Next to Chennai, Vellore has been handling the maximum number of positive cases, treated nearly 8000 people and 3000 in TPEC CCC alone. In the place of a maximum number of cases reporting, treatment and patient care is very important. Patient care and treatment-related feedback are necessary for trouble to shoot the problems and physical and psychological development.

Of the 74 patients of TPEC COVID Care Center, Vellore, 100% were taken the given Siddha drug properly. 82.4% had the most common symptoms like fever, cough, and throat irritation, and 52.7% had less common symptoms like loss of smell, loss of taste, and body pain. 82.4% did not notice any adverse reaction during drug administration. 16.2% cases developed gastric acidity and 1.3% developed mild dyspnea. 91.8% were recommended the Siddha system to others. 93.2% reported excellent disease progress. 90.7% of Siddha doctors quoted for 'Excellent' service on covid patients. Overall this feedback report investigates the positive response to the Siddha system of medicine on COVID-19.

14. Limitations

This feedback report analysis is only restricted to assess the importance of the Siddha System of Medicine towards the management of asymptomatic, mild to moderate Covid-19 Positive Patients and therapeutic integration. This study has to widen up to a large number of covid positive patients to all COVID Care Centers.

15. Conclusion

This feedback report explores the three important significance, during treatment. (a) Siddha medicine having notable effectiveness by controlling the symptoms (b) Siddha medicines have safety in covid-19 patients by minimal side effects are reported (c) overall services of Siddha doctors are appreciable by the patients and Siddha system is recommended to others. This analysis report helps to provide the possibility of the Siddha system for further or future clinical trials.

16. References

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