



WWW.IJAPC.COM

IJAPC
Vol 13 Iss 2

2020

G.G.P





Role of Ayurvedic Decoction (*Siddhamrutkwath*) in COVID 19 Pandemic - A Case Series Report

Pradnya Y Meshram^{*}, Vandana S Shinde² and Sushil V Chawre³

¹Ayush Ayurvedic Chikitsa Kendra, Nagpur, MS, India

²Govt. AyurvedHospital, Osmanabad, MS, India

³Govt. Ayurved College and Hospital, Nagpur, MS, India

ABSTRACT

Ayurveda is the eternal science. Ayurveda has described pandemic conditions as *Janpadodhwance* and *Janmar* with their treatment and guidelines in *Charak Samhita* and *Bhel Samhita* respectively. Symptoms of COVID 19 can be correlated with *Aupsargic Rogas* described in *Sushrut Samhita*. Acharyas gave guidelines to treat such conditions. To apply this knowledge one should have faith in Ayurveda and with the help of *Yuktiguna*, we can apply this knowledge for the betterment of mankind. Herbal drugs have proved their effectiveness for a long time in rare diseases. There are no evidence-based therapies for the Covid-19 pandemic to treat the patients successfully. The *Vaidyas* had attempted to create *Siddhamrutkwath* formulation with the help of *Yuktiguna*, and textual knowledge, at Ayurvedic OPD in the crisis of the COVID -19 pandemic. With the honest feeling of social responsibility, drugs in the powder form for decoction were freely distributed among 2000 subjects including COVID warriors like health care workers, policemen, and staff nurses. In short term consumption of medication, improvement was seen in *Ras-raktadidatu* and signs-symptoms of flu-like conditions. It was also seen that *Siddhamrutkwath* had better results in stress management and as a preventive measure in COVID 19 pandemic. So an effort was taken in a scientific way to present this work in the frame of the research.

KEYWORDS

Siddhamrutkwath, COVID 19 pandemic



Greentree Group Publishers

[Received 19/06/2020](#) [Accepted 26/08/2020](#) [Published 10/09/2020](#)



INTRODUCTION

COVID 19 is an infectious disease caused by a recently discovered novel Coronavirus¹. Coronavirus is a large family of enveloped positive strands RNA viruses. In India, on January 30th, 2020 the first case was observed. On 11th March 2020, WHO officially declared COVID -19 as Pandemic². There is no vaccination or proven drug therapy available until now. Currently, treatments only focus on symptomatic relief and oxygen support with the help of available data.

About 80% of Covid-19 cases present with mild symptoms, of the rest 20% cases, 15% require urgent medical attention and 5% are critical cases³. The government of India suggested preventive measures and declared lockdown to all over the country. Although the death rate is low in India, due to the infectious nature of the disease there is a phobia about the Coronavirus in the common public as well as in COVID worriers. In society, social stigma is another problem associated with COVID positive subjects.

Ayurveda is the eternal science. To protect the health of healthy individuals and remove disorders in the diseased is the foremost principle of *Ayurveda*. In *Ayurveda*, *Acharyas* has explained how pandemic conditions can be fatal and life-

threatening and given details of what measures and treatments can be taken to fight with it⁴. Infective nature of COVID-19 may be correlated with *Aupsargic Roga*⁵. COVID 19 pandemic is an alarming problem in the world nowadays. It affects all aspects of human life. Entire mankind is searching the solution for this. Health facilitators have facing two major challenges, the first one is the phobia of Coronavirus, and the second one is prevention from disease. In this situation, a small effort is taken. With the help of textual knowledge and *Yukti guna*⁶, *Sidhamrutkwath* formulation is prepared for prevention, to combat stress and symptomatic relief.

AIM

To observe possible effects of *Ayurvedic* herbal medication, *Siddhamrutkwath*.

OBJECTIVES

1. To observe the effects of *Ayurvedic* medication in patients and normal subjects during the Pandemic crisis.
2. To observe the untoward effects of medication.

MATERIALS AND METHODS

This was a prospective observational study. Herbal drugs in the powder form for



decoction were freely distributed among 2000 normal persons and patients including frontline workers as an immunity booster. The process of making *Kwath* is explained to everyone in detail. Counseling about preventive measures like hand hygiene, social distancing were explained.

Drug Dose-100 ml decoction once in a day.

Anupan- Lemon juice, honey, ginger juice one teaspoon each after consumption of kwath.

Kal- *Rasayankal* i.e. early morning empty stomach. Food consumption was advised after the natural urge of hunger.

Duration of therapy- Oral consumption of decoction for 3 days, once in a day followed by 3 days consumption of garlic(*Allium Sativum*) once in a day

OBSERVATIONS AND RESULTS

2000 subjects were randomly selected for this study. These subjects were observed according to the following criteria -age, sex, religion, occupation, residence, health profile, addiction, contact history with COVID cases, and co-morbidity conditions.

Results were obtained based on subjective criteria such as symptomatic relief in hyperthermia (*Jwar*), breathlessness (*Shawaskashata*), sleeplessness

(*Nidralpata*), etc. and objective criteria such as hemoglobin percentage, oxygen saturation, and immunoglobulin G test. SPSS Statistic software was used for statistical analysis.

Table 1 Demographic and clinical characteristics in 2000 subjects (patients and normal persons) in COVID 19 pandemic

S.N	Age group	Participants	Percentage
1.	5-18yrs	226	11.3%
2	19-60yrs	1005	50.25%
3	Above 60yrs	769	38.45%

Age group was categorized into 5-18yrs, 19-60yrs, and above 60 yrs. of age. As shown in Table no.1, Most of the population was middle age i.e. 50%. The percentage of children and adolescent participants was 11.3%. The percentage of senior citizens aged above 60 years was 38.45%.

Table 2 Distribution of sex in 2000 subjects (patients and normal persons) in Covid19 pandemic

S.N	Sex	Participants	Percentage
1.	Male	1246	62.3%
2	Female	754	37.7%

As shown in Table no.2, Male participants were near about doubled in number as compared to female participants

Table 3 Distribution of religion in 2000 subjects (patients and normal persons) in Covid19 pandemic

S.N	Religion	Participants	Percentage
1.	Hinduism	600	30%
2.	Islam	278	13.9%
3.	Buddhism	642	32.1%
4.	Christianity	123	6.15%
5.	Sikh	169	8.45%
6.	Other	188	9.4%

As shown in Table no.3, Buddhist participants were 32.1%, Hindu 30%, and



Muslim 13.9%, sub-caste in Maharashtra 9.4%, Sikh 8.45%, and Christy 6.15%.

Table 4 Distribution of Residential area of 2000 subjects (patients and normal persons) in Covid19 pandemic

S.N	Residential area	Participants	Percentage
1.	Crowd	1336	66.8%
2.	Non-crowd	664	33.2%

Table 5 Distribution of Occupation of 2000 subjects (patients and normal persons) in Covid19 pandemic

S.N	Occupation	Participants	Percentage
1.	COVID warrior	1246	62.3%
2.	Non-COVID warrior –Banker -627 House wife-127	754	37.7%

susceptible to contact with COVID patients such as policemen, traffic police were categorized as COVID warriors. COVID warriors have a high risk of getting an infection. As shown in Table no.5, COVID warriors subjects were 62.3% of and rest 37.7% were non-COVID warriors.

Table 6 Distribution of Health profile of 2000 subjects (patients and normal persons) in Covid19 pandemic

S.N	Health profile	Participants	Percentage
1.	Swastha (~Healthy)	1056	52.8%
2.	Vyadhit (~diseased)	944	47.2%

The healthy population involved in the study was more in numbers than diseased. As shown in Table no.6, the Percentage of healthy individuals was 52.8% and 47.2% were diseased.

Table 7 Distribution of Addiction of 2000 subjects (patients and normal persons) in Covid19 pandemic

S.N	Addiction	Participants	Percentage
1.	Smoking	224	11.20%
2.	Tobacco chewing	126	06.3%

Approximately 67% of the subjects were from the crowd area whereas 33.2% belong to the Non-crowd area as shown in Table no.4. Social Distancing plays a key role to prevent spread of COVID19. People directly came in contact with COVID persons that were doctors, nurses, AASHA workers, and persons

3.	Alcohol	114	05.7%
4.	Total addict	464	23.2%
5.	Non-addict	1536	76.8%

Smoking, drinking alcohol, Tobacco chewing is the aggravating factors for respiratory tract infection. As shown in Table no.7, addiction to smoking in participants was 11.20%, tobacco chewing 6.3%, and drinking alcohol 5.7% was observed. Percentage of Non-addict subjects were more i.e. 76.8%. COVID 19 is an infectious disease during the lockdown period due to phobia of disease and Government strict instruction about an addiction, Non-addict subject might be more in number.

Table 8 Distribution of Contact history of 2000 subjects (patients and normal persons) in Covid19 pandemic

S.N	Contact history	Participants	Percentage
1.	Yes	1573	78.65%
2.	No	427	21.35%

Participants who had travel history categorized as suspected cases. These



people were kept quarantine and areas sealed by the local authority. Persons who were susceptible to came in contact with those were categorized as contact history positive and negative. As shown in Table no.8, Participants with a history of contact with COVID cases were more than negative contact history. The percentage of subjects were contact history with susceptible COVID cases was 78.5% while 21.35% had no contact history.

Patients with Co-morbidity like hypertension, heart disease, DM, Obesity are more prone to COVID 19 infection. Due to phobia of the COVID 19 pandemic, for prevention, these patients also took

medication for 3 days along with their routine medication. As shown in Table no.9, Subjects having Respiratory tract infection were 40.63%, hypertension, and obesity (~*Sthoulya*) 26%, heart disease patients 4.97% were observed. This group of patients did not observe any untoward effects.

Table 9 Distribution of Co-morbidities of 2000 subjects (patients and normal persons) in Covid19 pandemic

S.N	Co-morbidities	Participants	Percentage
1.	Hypertension	224	26.54%
2.	Obesity	222	26.30%
3.	Heart disease	42	4.97%
4.	Respiratory disease	343	40.63%
5.	Renal disease	13	1.54%
6.	Non-co-morbidities	1156	57.8%

Table 10 Observed effect on clinical signs and symptoms of patients in 2000 subjects (patients and normal persons) in Covid19 pandemic

Sr.no.	Clinical signs and symptoms	Before	After	Percentage of relief
1.	<i>Jwar</i>	217	09	95.8%
2.	<i>Kas</i>	212	13	93.8%
3.	<i>Ayasenshwas</i>	1123	14	98.75%
4.	<i>Dourbalya</i>	1489	256	82.80%
5.	<i>Nidralpata</i>	921	13	98.58%
6.	<i>Malabadhata</i>	864	20	97.68%
7.	<i>Alpartav</i>	364	19	94.78%
8.	<i>Tamakshwas</i>	463	70	84.88%
9.	<i>Shwaskashata</i>	369	14	96.20%
10.	<i>KantheKandu</i>	584	18	96.91%
11.	<i>RugnasavendyaJwar</i>	918	104	88.67%

Elevated Body Temp >100 °F was labeled as *Jwar* (fever). As shown in Table no.10; *Jwar* symptom was present in 217 subjects. After taking *Kwath* 208 subjects were got relief. Only 9 subjects need additional medication so we concluded, in *Jwar* symptom 95.8% relief was observed.

ShwasKashata that is difficulty in breathing, symptom observed in 369 subjects, 355 subjects get cured with *Siddhamrut kwath* consumption for 3 days. The percentage of relief was 96.20%. *Nidralpata* (~sleeplessness) was observed in 921 cases 908 cases showed relief after



consumption of *Kwath* hence 98.58% relief concluded in sleeplessness symptom.

Effect of therapy on Hemoglobin: Apart from subjective criteria hemoglobin % Test

Table 11 Effect of Therapy based on Pair t-Test on Hb% of 2000 subjects (patients and normal persons) in Covid19 pandemic

Sr. N	Para meter	G R O U P	Mean \pm SD		Mean of diff. \pm SD	SE of Difference	't'	P
			BT	AT				
1	Hb %	T G	11.40 \pm 1.54	12.61 \pm 8.34	1.21 \pm 8.36	0.186	6.44	<.00001

The *p*-value is < .00001. The result was significant.

was carried out before and after the *Kwath* consumption. As shown in Table no.11, a

significant result was seen on Hemoglobin %.

Table 12 Effect of Therapy based on Pair t-Test on Immunoglobulin G of 97 cases in COVID 19 pandemic period

Sr. N	Para meter	G R O U P	Mean \pm SD		Mean of diff. \pm SD	SE of Difference	't'	P
			BT	AT				
1	<u>Immunoglobul in G</u>	T G	948.45 \pm 239	1069.28 \pm 22	120.83 \pm 84.63	8.59	14.06	<.00001

The *p*-value is < .00001. The result was significant.

Effect of therapy on Immunoglobulin G – Immunoglobulin G test was done in 97 cases before and after the *Kwatha*

consumption. As shown in Table no.12, a significant result observed in Immunoglobulin G.

Table- 13 Effect of Therapy based on Pair t-Test on the Oxygen saturation of 2000 subjects (patients and normal persons) in Covid19 pandemic

Sr. N	Para meter	G R O U P	Mean \pm SD		Mean of diff. \pm SD	SE of Difference	't'	P
			BT	AT				
1	<u>Oxygen saturation</u>	T G	87.30 \pm 4.67	90.23 \pm 4.34	2.94 \pm 3.17	0.071	41.49	<.00001

Oxygen saturation of 2000 subjects was measured with the help of Pulse oxymeter before and after the *Siddhamrut kwath* consumption. As shown in Table no 13, the result was significant.

DISCUSSION

Shastra is like light to see the things and the physician's intellect is like eyes. The physician acquiring both of these never commits the mistake while treating the



patients⁷. According to the basic principle of *Ayurveda*, diseases are not treated only based on signs and symptoms but also on the study of individuals. *Aacharya Vagbhata* suggested consideration of 13 factors in *Chikitsa*⁸. These are *Dushya, Desha, Bal, Kala, Agni (~digestion), Prakruti, Vaya, Satva, Satmya, and Awastha*. These factors play an important role in the treatment of any disease.

Pandemic is the condition where *Kala* and *Desha* are dominant factors among these 13 factors, and accordingly, *Saddhophaldayi Chikitsa* (~ emergency treatment) should be planned. Pandemic phobia not only affects the body but also the mind of an individual. Fear and *Dourbalya* are the *Ojakshay* symptoms described in the texts⁹. For the prevention of disease, Body Immunity is playing a crucial role. In *Ayurveda*, immunity is of three types. *Sahaj, Kalaj, and Yutikrut*¹⁰. For *Yutikrut* immunity, *Rasayan* treatment is indicated. Before *Rasayana*, *Shodhan* is needed but considering emergency, long term procedure is unconditional. So that, a unique combination of *Vyadhipratyanik* (~symptomatic), and drugs having *Rasayana* property were selected. A combination of these drugs was prepared named *Siddhamrutkwath*. The effect of *Siddhamrutkwath*, for boosting the

immunity as well as in the sign and symptoms of the disease were observed.

High-grade fever, difficulty in breathing and Cough, are the symptoms of common flu which are also commonly seen in COVID- 19. This leads to phobia among the general public. These symptoms were cured within 3 days of consumption of decoction, as seen in table number 10. *Siddhamrut kwath* was helpful to increase hemoglobin levels, as seen in Table number 11. As seen in Table no.12, Oxygen saturation observed to be increased with the 3 days medication. Patients with comorbidity conditions like Hypertension, DM, obesity, Heart Disease, Asthma did not shown any untoward effects of *kwath* consumption, as seen in Table no 9.

In the above observational study, for the management of COVID 19, *Siddhamrutkwath* helps to increase hemoglobin level (*Rasratadidhatuwardhan*), increase oxygen saturation of individuals as oxygen saturation level decrease in COVID 19 cases (*Vyadhipratyanik*) and better effect on immunoglobulin (*Rasayan* or immunity booster) Also.

CONCLUSION

The observed effect in this study was statistically significant. A unique



combination of *Rasayandravya* and *Vyadhipratyaynikdravyas* though used as short term consumption proved effective to combat stress, helpful to get relief symptomatically in flu-like symptoms and *Kwath* didn't show any untoward effects in comorbidity conditions. As this was a case series study, Hypothesis can be formulated that *Siddhamrutkwath* may acts as a preventive measure in COVID 19 pandemic. A further higher level of study needs to prove the efficacy of *Siddhamrutkwath* in COVID 19 cases.



REFERENCES

1. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
- 3 Zhou F., Yu T., Du R., Fan G., Liu Y., Liu Z (2020). Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. *Lancet*; 395(10229):1054–1062. DOI: 10.1016/S0140-6736(20)30566-3.
- 4 niihm.nic.in/eBooks/eCharaka charak Samhita Vimansthan 3/ 6 CCRAS, Delhi
- 5 niihm.nic.in/eBooks/eSushruta sushrut Samhita Nidansthan 5/33-34 CCRAS, Delhi
- 6 niihm.nic.in/eBooks/eCharaka charak Samhita su 26/31 CCRAS Delhi
- 7 niihm.nic.in/eBooks/eCharaka charak Samhita su 9/24 CCRAS Delhi
- 8 Astanghruday, translated by Tripathi Bramhanand, publishers chouxhamba sanskrit pratishtan Varanasi reprint edition 2015, Sutrasthan chapter no.11 shloka no.40.
- 9 Astanghruday, translated by Tripathi Bramhanand, publishers chouxhamba Sanskrit pratishtan Varanasi reprint edition 2015, Sutrasthan chapter no.12 shloka no.67 and 68.
- 10 niihm.nic.in/eBooks/eCarakacharak Samhita su 11/36 CCRAS, Delhi